

An abstract, expressive painting of the Golden Gate Bridge in San Francisco. The bridge's structure is rendered in bold, dark strokes, with the iconic red color of the bridge's towers and suspension cables. The background is a vibrant, textured wash of colors, including blues, purples, and greens, suggesting the sky and surrounding landscape. The overall style is painterly and dynamic, with visible brushstrokes and a rich, layered color palette.

# **2001 SAN FRANCISCO HIV PREVENTION PLAN**

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2001





# **2001 SAN FRANCISCO HIV PREVENTION PLAN**

Developed by the

**HIV PREVENTION PLANNING COUNCIL,  
A COMMUNITY PLANNING BODY FUNDED BY THE  
CENTERS FOR DISEASE CONTROL AND PREVENTION**

in partnership with the

**SAN FRANCISCO DEPARTMENT OF PUBLIC HEALTH  
AIDS OFFICE**

Cooperative Agreement Number # U62/CCU902017-15

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**JUNE 2001**

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## **DEDICATION**

The 2001 HIV Prevention Plan is dedicated to the people in San Francisco who have been infected and affected by HIV and AIDS, and to the memories of our partners, families, friends, co-workers, and leaders who have passed on due to this devastating epidemic.

A special dedication is given to John Blake West, former HPPC member and Chair of the committee that oversaw the writing of this Plan. We thank him for his deep commitment to community planning and to ending the HIV/AIDS epidemic. John West died in April 2001.

This Plan is also dedicated to former Council member Jeff Polt and former Council Parliamentarian Tony Leone, who made invaluable contributions to HIV prevention in San Francisco.





## ACKNOWLEDGMENTS

---

Special thanks and appreciation go to the many individuals and organizations who contributed countless hours to HIV Prevention Planning in San Francisco.

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DPH Co-chair: Steven Tierney

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## **Chapter 8. Linkages and Coordination: Partnerships in HIV Prevention**

*Discusses how HIV prevention programs coordinate with each other and with other services (e.g., STD, mental health, substance abuse) and provides recommendations for improving linkages.*

## **Chapter 9. Technical Assistance: Supporting Community-Based HIV Prevention**

*Describes the current technical assistance needs of HIV prevention providers, the HIV Prevention Planning Council, and the HIV Prevention Section of the San Francisco Department of Public Health, and reviews mechanisms in place to address the needs on an ongoing basis.*

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## CHAPTER OVERVIEW

**Section I: How To Use This Plan** gives answers to frequently asked questions that will help you understand and navigate the Plan and use it to meet your particular needs.

**Section II: Guide to Common Abbreviations** gives a list of acronyms and their definitions that appear frequently throughout the Plan.

**Section III: Glossary** defines several terms used in the Plan.

**Section IV: Important Phone Numbers and Websites** directs the reader to HIV prevention resources.

**Section V: Community Planning Process** explains how the community planning process works in San Francisco and how the Plan was developed.

## Section I: HOW TO USE THIS PLAN

The following frequently asked questions and their answers are designed to assist you to understand and navigate the Plan and use it to meet your particular needs.

### What is the HIV Prevention Plan for San Francisco?

- The primary task of the HIV Prevention Planning Council (HPPC), San Francisco's community planning group, is to develop an HIV Prevention Plan that is based on scientific evidence and community values. The Plan is designed to be the driving force in the health department's allocation of federal HIV prevention resources throughout the communities they serve. The Plan establishes priorities for addressing the epidemic in the jurisdiction.

### What is in the Plan?

- Refer to the Table of Contents.

### What is in each chapter?

- Refer to the brief chapter descriptions in the Table of Contents.
- Refer to the chapter overviews at the beginning of each chapter.

### How do I know what all the abbreviations and acronyms in the Plan stand for?

- First refer to the Guide to Common Abbreviations (pp. iv-v).
- If the abbreviation is not listed, refer to the Glossary (pp. vi-viii).
- If the abbreviation is still not listed, check toward the beginning of the chapter. All abbreviations are spelled out the first time they are mentioned.

### Where do I find explanations of words, phrases, or acronyms used in the Plan?

- Refer to the Glossary (pp. vi-viii).

### Where do I find a summary of the Plan?

- The Needs Assessment chapter represents a good overview of the information presented in the rest of the Plan (pp. 7-40).

### How was the Plan developed?

- Refer to the Community Planning Process section of the Guide to the Plan (pp. x-xiv).

### What are behavioral risk populations, or BRPs?

- Behavioral risk populations, abbreviated BRPs, represent the framework that the HPPC uses to describe the behaviors that put people at risk for contracting HIV in San

Francisco and to prioritize populations for HIV prevention efforts. Thus, they are organized by behaviors rather than identity. For example, there is no BRP for "gay men." The BRP is males who have sex with males, or MSM, and encompasses all men who have sex with men, not just gay men. There are eight BRPs. Becoming familiar with the BRPs will facilitate reading and understanding this Plan. The BRP acronyms are defined in the Guide to Common Abbreviations (pp. iv-v).

**Which chapters can I use to write grant applications, obtain data and information on the needs of my population (needs assessments), write problem statements, and design programs?**

- The Goals and Objectives chapter reviews the goals, objectives, and strategies designed to end the HIV epidemic in San Francisco (pp. 1-6).
- The Needs Assessment chapter provides detailed epidemiologic and behavioral information for each behavioral risk population, as well as subpopulations within each behavioral risk population (pp. 7-40).
- The Epidemiologic Profile offers detailed data on the size and characteristics of populations in San Francisco, provides extensive HIV and AIDS prevalence and incidence data, and discusses behavioral and social factors that affect HIV risk (pp. 41-110).
- Setting Priorities for HIV Prevention outlines San Francisco's priority-setting model and priority populations for HIV prevention (pp. 111-122).
- The Strategies and Interventions chapter presents a variety of behavioral theories and approaches to HIV prevention (pp. 123-174).

**Where do I look for a "snapshot" view of the HIV/AIDS epidemic in San Francisco?**

- Refer to pp. 62-63 for HIV prevalence and incidence estimates for 2001.

**Where do I find information about specific populations?**

- Refer to the Needs Assessment chapter for epidemiologic data and behavioral risk information, as well as recommendations for prevention, organized by behavioral risk population and racial/ethnic and other subpopulations (pp. 7-40).
- Refer to the Epidemiologic Profile for data and information on population characteristics (e.g., size and geographic location of various populations in San Francisco), data on HIV and AIDS prevalence and incidence, a discussion of factors that influence HIV transmission, and behavioral risk information. This chapter is organized by type of data, as opposed to by behavioral risk population (e.g., one section gives recent AIDS cases for all groups, another section gives behavioral data for all groups) (pp. 41-110).
- Refer to Setting Priorities for HIV Prevention to see how your population fits into the priorities for HIV prevention in San Francisco (pp. 111-122).

**Where do I find a description of different HIV prevention approaches, strategies, and interventions?**

- Refer to the Strategies and Interventions chapter (pp. 123-174).

**What do I do if I can't find the information I am looking for?**

- Use the Index to the Plan (p. 229).

**How can I get involved in HIV prevention or HIV health services community planning?**

- Become a Council member, join a Council committee as a community member, or attend Council/committee meetings and voice your concerns during the public comment period.
- Contact the AIDS Office at (415) 554-9000.

**Where do I go if I want to obtain additional HIV prevention information, materials, or resources?**

- Refer to Important Phone Numbers and Websites (p. ix).
- Refer to the References at the end of the Plan for current published and unpublished HIV prevention articles and studies (pp. 217-228).

## Section II: GUIDE TO COMMON ABBREVIATIONS

### GENERAL ABBREVIATIONS

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**AIDS**- Acquired immune deficiency syndrome

**BRP**- Behavioral risk population.

**CDC**- Centers for Disease Control and Prevention.

**HIV**- Human immunodeficiency virus

**HPPC**- HIV Prevention Planning Council.

**SFDPH**- San Francisco Department of Public Health.

**STD**- Sexually transmitted disease

### BEHAVIORAL RISK POPULATION ABBREVIATIONS

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In general, use the following guide to understanding the BRP acronyms:

**M** = Males

**F** = Females

**T** = Transgendered persons

**S** = Who have sex with

**/** = And

**IDU** = And inject drugs

**FSF**- Females who have sex with females

**FSF-IDU**- Females who have sex with females and inject drugs

**FSM**- Females who have sex with males

**FSM-IDU**- Females who have sex with males and inject drugs

**FSM/F**- Females who have sex with males and females

**FSM/F-IDU**- Females who have sex with males and females and inject drugs

**FST**- Females who have sex with transgendered persons

**FST-IDU**- Females who have sex with transgendered persons and inject drugs

**FST/F**- Females who have sex with transgendered persons and females

**FST/F-IDU**- Females who have sex with transgendered persons and females and inject drugs

**FST/M**- Females who have sex with transgendered persons and males

**FST/M-IDU**- Females who have sex with transgendered persons and males and inject drugs

**MSF**- Males who have sex with females

**MSF-IDU**- Males who have sex with females and inject drugs

**MSM**- Males who have sex with males

**MSM-IDU**- Males who have sex with males and inject drugs

**MSM/F**- Males who have sex with males and females

**MSM/F-IDU**- Males who have sex with males and females and inject drugs

**MST**- Males who have sex with transgendered persons



**MST-IDU**- Males who have sex with transgendered persons and inject drugs

**MST/F** Males who have sex with transgendered persons and females

**MST/F-IDU**- Males who have sex with transgendered persons and females and inject drugs

**MST/M**- Males who have sex with transgendered persons and males

**MST/M-IDU**- Males who have sex with transgendered persons and males and inject drugs

**TSF**- Transgendered persons who have sex with females

**TSF-IDU**- Transgendered persons who have sex with females and inject drugs

**TSF/T**- Transgendered persons who have sex with females and transgendered persons

**TSF/T-IDU**- Transgendered persons who have sex with females and transgendered persons and inject drugs

**TSM**- Transgendered persons who have sex with males

**TSM-IDU**- Transgendered persons who have sex with males and inject drugs

**TSM/F**- Transgendered persons who have sex with males and females

**TSM/F-IDU**- Transgendered persons who have sex with males and females and inject drugs

**TSM/T**- Transgendered persons who have sex with males and transgendered persons

**TSM/T-IDU**- Transgendered persons who have sex with males and transgendered persons and inject drugs

**TST**- Transgendered persons who have sex with transgendered persons

**TST-IDU**- Transgendered persons who have sex with transgendered persons and inject drugs

## Section III: GLOSSARY

**AIDS-** Acquired immune deficiency syndrome.

**API-** Asian/Pacific Islander.

**BEHAVIORAL RISK ASSESSMENT-** A data collection instrument that providers have been required to use in the past to assess and analyze clients' behavioral risks for HIV infection; as of the writing of this Plan, it is no longer required.

**BEHAVIORAL RISK POPULATION-** The framework that the HPPC uses to describe the behaviors that put people at risk for contracting HIV in San Francisco and to prioritize populations for HIV prevention efforts. There are eight BRPs. The BP acronyms are defined in the Guide to Common Abbreviations (pp. iv-v).

**BEHAVIORAL SCIENCE-** A science, such as psychology or sociology, that seeks to determine why people do what they do. In HIV prevention, behavioral science is used to predict and reduce risk behaviors.

**BEHAVIORAL THEORY-** A model or framework, developed through multiple observations over time, that depicts and predicts how people behave and that shows how the different factors that influence behavior are linked together.

**BRA-** Behavioral Risk Assessment.

**BRP-** Behavioral risk population.

**CAPS-** Center for AIDS Prevention Studies, at the AIDS Research Institute of the University of California, San Francisco.

**CENTERS FOR DISEASE CONTROL AND PREVENTION-** The federal agency responsible for tracking diseases that endanger public health, such as HIV and tuberculosis. CDC is the major source of funding for HIV prevention in San Francisco and the United States.

**CDC-** Centers for Disease Control and Prevention.

**CDC GUIDANCE-** The CDC document that gives additional information and rules for receiving funds for HIV prevention programs and defines the process of HIV prevention community planning.

**COMMUNITY PLANNING GROUP-** The official HIV prevention planning body that follows the Guidance to develop the HIV Prevention Plan for the project area.

**COOPERATIVE AGREEMENT-** The contract between CDC and the health department that outlines the scope of work for the project area and awards funds for HIV prevention in the jurisdiction.

**CPG-** Community planning group.

**CTR/PCRS-** Counseling, Testing, Referral/ Partner Counseling and Referral Services. See pp. 159-160 for a more complete description.

**EPIDEMIC-** A disease that has spread rapidly among a large number of people within a short period of time.

**EPIDEMIOLOGY-** The study of epidemics and epidemic diseases such as HIV and tuberculosis; in prevention planning, this epidemiologic information indicates which population, age group, and ethnic groups, are affected by HIV in a defined area.

**EPIDEMIOLOGIC PROFILE-** A description of the HIV/AIDS epidemic in a jurisdiction.

**EVALUATION-** The process of collecting and analyzing data to determine whether programs are being implemented well and if they are effective.

**FTM**- Female-to-male transgendered person.

**GAP ANALYSIS**- A description of the unmet HIV prevention needs within the high-risk groups defined in the epidemiologic profile in a jurisdiction, developed by comparing the needs assessment and resource inventory.

**HAART**- Highly active antiretroviral therapy.

**HIV**- Human immunodeficiency virus.

**HIV PREVENTION COMMUNITY PLANNING**- A CDC initiative in which people representing at-risk communities and those who are HIV-infected meet with scientists and other professionals in order to decide on the most effective HIV prevention programs and methods for stopping the spread of HIV in their area.

**HIV PREVENTION PLAN**- The result of the community HIV prevention planning process. This Plan takes into account scientific evidence and community values in order to provide the most effective prevention efforts within a specific area.

**HIV PREVENTION PLANNING COUNCIL**- San Francisco's HIV prevention community planning body.

**HIV PREVENTION SECTION**- The section of the SFDPH responsible for HIV prevention in San Francisco.

**HPPC**- HIV Prevention Planning Council.

**INCIDENCE NUMBER**- The number of new HIV infections over a particular period of time (one year, five years, etc.).

**INCIDENCE RATE**- The percent of uninfected people who acquire HIV over a particular period of time (one year, five years, etc.).

**INTERVENTION**- A specific activity that aims to change or avert high-risk behavior that may result in HIV infection. This is the type of service a prevention program provides (e.g., individual sessions, outreach, educational workshops).

**IRRC**- Individual risk reduction counseling. See pp. 157-158 for a more complete description.

**LETTER OF CONCURRENCE**- A required part of a health department's application to the CDC for federal HIV prevention funds. This letter states that the planning group agrees that the prevention programs outlined in the health department's application reflect the HIV Prevention Plan. This letter explains how the planning group created its HIV prevention plan.

**LETTER OF NONCONCURRENCE**- Can be a part of a health department's application to the CDC for federal HIV prevention funds, if a planning group does not agree that the health department's application reflects the HIV Prevention Plan. The group must include a letter explaining why members disagree with the application.

**MOU**- Memorandum of understanding.

**MTF**- Male-to-female transgendered person.

**MSW**- Multiple session workshop. See pp. 169-170 for a more complete description.

**NEEDS ASSESSMENT**- The process of obtaining and analyzing findings about community needs. Needs assessments may use several methods of information and data collection to determine the type and extent of unmet needs in a particular population or community.

**OUTCOME EVALUATION**- The process of collecting and analyzing data that demonstrate whether a particular intervention is causing changes in knowledge, behavior, attitudes, or beliefs, as opposed to some other factor that may be contributing to the change.

**OUTCOME MONITORING-** The process of collecting and analyzing data that demonstrate individual clients' progress toward the objectives for the intervention.

**PCM-** Prevention case management. See pp. 155-156 for a more complete description.

**PEP-** Post-exposure prevention (or prophylaxis). See pp. 164-165 for a more complete description.

**PLANNING SUPPORT-** Administrative, logistical, technical, and other support provided to the HPPC by the HIV Prevention Section and its consultants.

**PREVALENCE-** The percentage of people infected with HIV or diagnosed with AIDS in a defined population at a specific point in time.

**PREVENTION INDICATOR-** A data element that points to trends in the HIV epidemic and provides information about where prevention efforts should be targeted.

**PRIORITY-SETTING-** The process of identifying the relative risks of various populations as the basis for effective allocation of HIV prevention funding.

**PROCESS EVALUATION-** The process of collecting and analyzing data on an intervention and the target population during implementation to demonstrate whether it is occurring as planned. These data are used to improve prevention programs. Answers question such as: How many people are being served? What are their demographics?

**PROGRAM-** A group of interventions or strategies that together form a cohesive unit.

**RESOURCE INVENTORY-** A description of existing resources for HIV prevention, including fiscal, personnel, and program resources.

**RYAN WHITE COMPREHENSIVE AIDS RESOURCES EMERGENCY ACT-** The federal legislation that provides funds for the care of people living with HIV and AIDS.

**SFDPH-** San Francisco Department of Public Health.

**SSG-** Single session group. See pp. 167-168 for a more complete description.

**STD-** Sexually transmitted disease.

**STRATEGIC EVALUATION-** Using social science, research, and other scientific methods to determine whether HIV prevention is effective and how to improve prevention services.

**STRATEGY-** A prevention approach that can be applied across a spectrum of possible interventions (such as peer education).

**SURVEILLANCE-** The gathering of HIV- and AIDS-related data from testing sites, treatment facilities, and other groups that, when analyzed, produce a full picture of trends in the epidemic in the states and throughout the nation.

**TA-** Technical assistance.

**TECHNICAL ASSISTANCE-** A service that assists with training and skills development that allows people and groups to do their jobs better, including education and knowledge development in areas that range from leadership and communications to creating an effective needs assessment tool and understanding statistical data.

**TG-** Transgendered.

**UCSF-** University of California, San Francisco.

**VBIO-** Venue-based individual outreach. See pp. 153-154 for a more complete description.

**VBGO-** Venue-based group outreach. See pp. 173-174 for a more complete description.

## Section IV: IMPORTANT PHONE NUMBERS AND WEBSITES

**Academy for Educational Development (AED)**-<http://www.aed.org/textindex.html>, (202) 884-8000

**Aegis**-<http://www.aegis.com/>

**AIDS Research Institute at UCSF**-<http://ari.ucsf.edu/>, (415) 597-9203

**Centers for Disease Control and Prevention (CDC)**- <http://www.cdc.gov/>, (404) 639-3311

- Division of HIV/AIDS Prevention- <http://www.cdc.gov/hiv/dhap.htm>
- CDC Compendium of HIV Prevention Interventions with Evidence of Effectiveness- <http://www.cdc.gov/hiv/pubs/hivcompendium.pdf>
- CDC National Prevention Information Network- <http://www.cdcnpin.org/start.htm>

**Center for AIDS Prevention Studies at UCSF**-<http://www.caps.ucsf.edu/>, (415) 597-9100

**HIVInSite**-<http://hivinsite.ucsf.edu/>

**HIV Consensus Meeting Report, San Francisco 2001**-<http://www.dph.sf.ca.us/>, (415) 554-9050

**HIV Prevention Planning Council (HPPC)**-<http://www.dph.sf.ca.us/HIVPrevPlan/hppchome.html>, (415) 554-9492

**National Alliance of State and Territorial AIDS Directors (NASTAD)**-<http://nastad.vertex.net/>, (202) 434-8090

**National Minority AIDS Council (NMAC)**-<http://www.nmac.org/>, (202) 483-6622

**San Francisco Department of Public Health**-<http://www.dph.sf.ca.us/>, (415) 554-9000

**STD/HIV Prevention Training Center**-<http://itsa.ucsf.edu/~bolan/std.htm>, (510) 883-6600



## Section V: COMMUNITY PLANNING PROCESS

### OVERVIEW OF COMMUNITY PLANNING FOR HIV PREVENTION

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In the early 1990s, communities were involved in implementing HIV prevention services but were not involved in the planning of comprehensive state/local prevention programs. Decisions regarding HIV prevention were either mandated by Congress or administered by the Centers for Disease Control and Prevention (CDC) through its Cooperative Agreement with health department grantees. Community planning was developed to reflect the belief that determining how best to respond to local HIV prevention priorities and needs is best carried out through local decision-making.

In December 1993, the CDC initiated HIV prevention community planning by issuing the Supplemental Guidance on HIV Prevention Community Planning for Non-competing Continuation of Cooperative Agreements for HIV Prevention Projects. This Guidance is the blueprint for HIV prevention community planning and provides flexible direction to grantees (65 state, local, and territorial health departments or project areas) receiving federal HIV prevention funds to design and implement a participatory community planning process. The Guidance requires health departments to work in collaboration with community planning groups (CPGs) to design local prevention plans that best represent the needs of the various communities at risk for, or infected with, HIV. Today there are CPGs in the 65 project areas that receive CDC HIV prevention funding through Cooperative Agreements. San Francisco is one of the six cities that receive direct funding from the CDC and thus represents its own project area.

The major goals of HIV prevention community

planning are (1) to improve the effectiveness of HIV prevention programs, and (2) to design local prevention plans that best represent the needs of the various communities at risk for, or infected with, HIV through:

- Participation by individuals infected with and affected by HIV.
- Application of sound scientific methods that will halt the spread of HIV disease.

Through ongoing comprehensive planning, the HIV prevention community planning process works to improve the effectiveness of state, local, and territorial health departments' HIV prevention programs. It aims to strengthen the scientific basis, community relevance, and population- or risk-based focus of prevention interventions. HIV prevention community planning is:

- **Evidence-based.** The process of planning and prioritization of populations and interventions is based on scientific and epidemiologic data, including HIV/AIDS, STD, and behavioral surveillance data; qualitative data; ongoing program experience; program evaluation; a comprehensive needs assessment and resource inventory process; and other local data.
- **Inclusive.** The community planning process incorporates the views and perspectives of groups infected and affected by HIV/AIDS. Some of the groups that may participate in the process include people at risk for HIV infection for whom the programs are intended, HIV positive individuals, providers of HIV prevention services, experts in behavioral science and epidemiology, and HIV prevention health department employees.

The primary task of CPGs is to develop a Comprehensive HIV Prevention Plan that is based on scientific evidence and community



values. The Plan is designed to be the driving force in the health departments' allocation of federal HIV prevention resources throughout the communities they serve. The Plan establishes priorities for addressing the epidemic in the jurisdiction.

CPGs are expected to work toward achieving the five core objectives of HIV Prevention Community Planning, which are:

1. Foster the openness and participatory nature of the community planning process.
2. Ensure that the CPG(s) reflects the diversity of the epidemic in the jurisdiction, and that expertise in epidemiology, behavioral/social science, health planning, and evaluation are included in the process.
3. Ensure that priority HIV prevention needs are determined based on an epidemiologic profile and a needs assessment.
4. Ensure that interventions are prioritized based on explicit consideration of priority needs, outcome effectiveness, cost and cost effectiveness, theory, and community norms and values.
5. Foster strong, logical linkages between the community planning process, application for funding, and allocation of CDC HIV prevention resources.

## **THE SAN FRANCISCO HIV PREVENTION PLANNING COUNCIL**

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### **A BRIEF HISTORY**

Even before the CDC established community planning for HIV prevention as a national phe-

nomenon, the San Francisco Department of Public Health (SFDPH) had been exploring ways to increase community involvement in planning for HIV prevention. In 1994, The CDC awarded grants to 65 project areas to establish CPGs, providing the opportunity for San Francisco to realize this goal in a much grander way than had been anticipated. In 1994, the HIV Prevention Planning Council (HPPC) was formed. Ninety-three individuals were nominated to serve on the HPPC and 37 were selected. In the first year, the Council accomplished numerous goals: they wrote Bylaws to govern Council processes; they hired planning support consultants to assist with technical, administrative, and evaluation tasks; and on October 3, 1994, just 9 months after the first meeting of the HPPC, they produced the first San Francisco HIV Prevention Plan.

The HPPC rewrote the Plan in 1997, issued an addendum to the 1997 Plan in 1998, and produced a condensed version of the 1997 Plan and the 1998 addendum. In 2000 and 2001, the HPPC rewrote and issued the current Plan.

### **HPPC STRUCTURE**

The HPPC is a body of 21 to 37 members, of which three serve as the Co-chairs of the Council. (Two Co-chairs are from the community, and one Co-chair is an SFDPH employee, currently the Director of HIV Prevention.) The full body meets monthly. In addition, each member sits on at least one committee, each of which has a particular purview and scope of work in relation to what is required in the Cooperative Agreement. Leadership is also provided by the Steering Committee, which convenes every month and is composed of the HPPC Co-chairs, the Chairs of each committee, and two at-large Council members. In addition, ad hoc working groups are often formed to complete specific, time-limited tasks, and Council members join these on a volunteer basis.

## PLANNING SUPPORT

State and local health departments fulfill an important role in supporting HIV prevention community planning. In general, health departments offer three types of support to the community planning process: (1) leadership, (2) technical assistance, and (3) logistical support. In San Francisco, the HIV Prevention Section has hired consultants to assist the Section and the HPPC in fulfilling their roles and responsibilities.

- **Logistical Support:** The logistical support team. Composed of HIV Prevention Section staff persons, takes the minutes at all HPPC, committee, and working group meetings.
- **Process Evaluation:** The process evaluation team fulfills the CDC mandate for evaluating the community planning process. They attend HPPC, committee, and working group meetings, make observations about the process and recommendations for improvements, and provide regular reports to HPPC members, the HPPC Co-chairs, and Steering Committee (the evaluation of the HPPC is described in detail later in the chapter).
- **Technical Support:** The technical support team provides technical support to the HPPC, in addition to that provided by the HIV Prevention Section. Some examples of technical support tasks include writing the Plan, summarizing research findings for the HPPC and committees, and revising HPPC governing documents.

## COUNCIL COMMITMENT TO THE PRINCIPLES OF INCLUSION, REPRESENTATION, AND PARITY

Principle number four of the 15 principles of community planning as outlined in the Guidance is parity, inclusion, and representation (or PIR). Historically, this concept has been

referred to as "PIR" but the current CDC Guidance presents the three tenets in the following order: inclusion, representation, and parity (IRP). This ordering supports the logical connections between the three tenets, with inclusion as the foundation from which representation and parity flow.

The interpretation of the IRP principle is an ongoing priority for the HPPC. Although the CDC Guidance gives definitions for each of the three aspects of IRP (given below), the HPPC is consistently implementing creative ways to maintain its commitment to IRP while ensuring smooth functioning of the body.

- **Inclusion:** "The assurance that the views, perspectives, and needs of all affected communities are included and involved in a meaningful manner in the community planning process."
- **Representation:** "The assurance that those who are representing a specific community truly reflect that community's values, norms, and behaviors."
- **Parity:** "All members of the CPG are provided opportunities for orientation and skills building to participate in the process and to have an equal voice in voting and other decision-making activities."

## OVERVIEW OF THE PROCESS FOR DEVELOPING THE PLAN

This HIV Prevention Plan was developed by the HPPC in 2000 and early 2001. The HPPC charged committees with developing various portions of the revised Plan, with technical support and assistance provided by SFDPH and its consultants. In 2000, the Strategic Evaluation chapter, a first draft of the Epidemiologic Profile chapter, and the conceptual framework for the Priority-Setting chapter were completed. In early 2001, the Plan Revision Committee in conjunction with SFDPH and the technical support

team, completed the remaining chapters, updating information from the 1997 Plan with the latest research findings and information and streamlining the content and presentation

to make it more user friendly. The committee approved each chapter as it was written and forwarded the chapters to the full HPPC for review and approval.



## Chapter I

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# GOALS AND OBJECTIVES: THE FUTURE OF HIV PREVENTION



## OVERALL GOAL FOR SAN FRANCISCO: ELIMINATE NEW HIV INFECTIONS.

The ultimate goal of HIV prevention in San Francisco has always been, and continues to be, to eliminate new HIV infections. Substantial progress toward this goal has been made since the 1980s, a time when much higher levels of transmission occurred, resulting in thousands of lives being saved. Such successes, which are largely unparalleled in public health history, are attributable to two factors: (1) the personal behavioral changes related to safer sex adopted by gay and bisexual men, as well as the leadership they have provided in the HIV prevention arena, and (2) the availability and accessibility of needle exchange and the resulting changes in injection practices among IDUs. For some populations, the elimination of new infections is on the horizon. For example, FSM, FSM/F, FSE, MSE, and IDUs all have relatively low incidence rates in San Francisco, a testament to the success of prevention efforts in these populations. For these groups, continued HIV prevention efforts are necessary to promote the downward trend in infection rates. For other populations, such as MSM, MSM/F and MSM-IDU, MSM/F-IDU, recent increases in infection rates are of concern, although they should not overshadow the dramatic long-term reductions in HIV transmission that have occurred over the past two decades. In this era of the epidemic when new infections are on the rise among MSM, MSM/F and MSM-IDU, MSM/F-IDU populations, and high levels of transmission exist among transgendered populations, stronger efforts are needed to build on past successes. The challenges posed by the new trends in the HIV/AIDS epidemic have stimulated a renewed commitment in San Francisco to ensure that the goal of eliminating new HIV infections is realized for *all* groups affected by the epidemic. The following objectives and strategies to be implemented over the next three years (through 2004) represent San Francisco's approach to the elimination of HIV transmission and reflect the priorities described in the 2001 HIV Prevention Plan for San Francisco. The goals, objectives, and strategies are not necessarily listed in priority order.

### OBJECTIVES AND STRATEGIES FOR THE BEHAVIORAL RISK POPULATIONS

#### MSM, MSM/F and MSM-IDU, MSM/F-IDU

**Objective:** Reverse the trend of increasing new HIV infections by decreasing HIV incidence to 1997 levels or lower, from 2.2% to 1.04% or lower for MSM, MSM/F and from 4.6% to 1.99% or lower for MSM-IDU, MSM/F-IDU, by 2004.

Strategy 1: Increase interventions that address the role of alcohol and drug use (both injection and non-injection) in sexual risk taking.

- Make drug and alcohol treatment available

and accessible to all who want it.

- Make needle exchange available and accessible to all individuals.
- Include discussions of drug and alcohol use in all risk reduction interventions.
- Include discussions of other STDs in addition to HIV as consequences of sexual risk taking in all risk reduction interventions, and provide referrals to STD testing.

Strategy 2: Increase research about the increases in sexual risk behaviors and HIV transmission among MSM and MSM-IDU, and identify effective strategies and interventions for addressing this issue.

- Explore the role of each of the following issues and identify feasible and effective interventions and strategies: non-injection drug use, the availability and perceived effects of highly active antiretroviral therapy



(HAART) on transmissibility of HIV, and emerging community issues such as bare-backing.

- Conduct at least one research study that explores the unique risk factors and co-factors that contribute to HIV incidence among MSM of color, particularly among African American and Latino MSM.

Strategy 3: Emphasize the importance of and benefits to remaining HIV-negative.

- Challenge the notion that HIV is no longer a life-threatening condition by counteracting misleading messages (e.g., advertisements for HIV medications showing men climbing mountains) and developing new messages that address the current context of HIV/AIDS.
- Incorporate new messages into prevention efforts about the limitations of anti-retroviral therapy in terms of its capacity to affect the likelihood of HIV transmission.
- Increase emphasis on the advantages of being HIV-negative and the disadvantages of being HIV-positive in prevention interventions.
- Incorporate STD information and prevention into HIV prevention interventions in the context of benefits to being HIV-negative (e.g., lower susceptibility to STDs and their harmful effects if one is HIV-negative).

Strategy 4: Conduct at least one formative research project to increase understanding of the dynamics of sexual partnerships between men of different racial/ethnic backgrounds and between men of different ages that may affect the likelihood of engaging in self-protective behaviors.

Strategy 5: Increase consideration of the unique prevention needs of heterosexually identified MSM and MST when designing and implementing interventions and research studies.

- Identify and implement new methods for recruiting non-gay-identifying men who have sex with men into interventions and studies.

## **TSM, TSM/F, TSF, TST, TSM/T, TSF/T and TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU**

**Objective:** Decrease the number of new HIV infections by at least 50%, from 6.2% to 3.1% or lower for MTF transgendered non-IDUs and from 13.2% to 6.6% or lower for MTF transgendered IDUs, by 2004.

Strategy 6: Increase provider cultural competency and sensitivity to the unique prevention needs of transgendered populations.

Strategy 7: Increase the use of a peer approach to service provision.

- Increase the number of transgendered staff and volunteers who provide prevention services for the transgender community, especially outreach services.

Strategy 8: Incorporate elements that strengthen the transgender community and that provide a social support network for transgendered individuals into all interventions.

Strategy 9: Emphasize the importance of and benefits to remaining HIV-negative.

- Increase emphasis on the advantages of being HIV-negative and the disadvantages of being HIV-positive in prevention interventions.
- Incorporate discussion of STDs into HIV prevention interventions in the context of benefits to being HIV-negative (e.g., lower susceptibility to STDs and their harmful effects if one is HIV-negative).

Strategy 10: Continue to conduct epidemiologic and behavioral research among MTF transgendered populations so that trends in HIV infections over time can be determined. (Currently, this cannot be done because HIV-related data has only begun to reflect transgendered persons as a separate category in recent years.)

## **FSM-IDU, FSM/F-IDU, FSF-IDU and MSF-IDU**

**Objective:** Eliminate new HIV infections by 2004. (Due to already low incidence rates in this population of 1.1% for FSM-IDU, FSM/F-IDU, FSF-IDU and 0.6% for MSF-IDU, it is possible that this objective will be achieved over the next three years.)

Strategy 11: Increase attention to the unique needs of individuals who continue to share injection equipment despite the availability of needle exchange programs in San Francisco.

Strategy 12: Increase attention to sexual risk taking among FSM-IDU and FSM/F-IDU (including lesbian-identifying).

## **FSM, FSM/F, FSF AND MSF**

**Objective:** Eliminate new HIV infections by 2004. (Due to already low incidence rates in this population of less than 0.1% for both FSM, FSM/F, FSF and MSF, it is possible that this objective will be achieved over the next three years.)

Strategy 13: Increase prevention efforts targeting the high-risk male partners of women and the high-risk female partners of men (e.g., IDUs, people with multiple partners, people with STDs) and that focus on responsibility to protect both oneself and others.

## **OTHER STRATEGIES FOR IMPROVING PREVENTION**

### **SERVICE PROVISION**

Strategy 14: Increase interventions that address the role of alcohol and drug use (both injection and non-injection) in HIV risk behavior for all target populations.

- Make drug and alcohol treatment available

and accessible to all who want it.

- Make needle exchange available and accessible to all individuals.
- Include discussions of drug and alcohol use in all risk reduction interventions.
- Include discussions of other STDs in addition to HIV as consequences of sexual risk taking in all risk reduction interventions, and provide referrals to STD testing.

Strategy 15: Increase and improve prevention for HIV-positive individuals.

- Increase the number of programs that provide HIV prevention to HIV-positive individuals, both interventions that address issues with particular salience for HIV-positive people and interventions that serve only HIV-positive people.
- Emphasize the importance of health maintenance among HIV-positive individuals and increase awareness of the role that they play in preventing new HIV and STD infections.
- Improve prevention efforts targeting HIV-positive sex workers, for whom economic security may require engaging in risk behavior.
- Increase attention to STDs in prevention interventions for HIV-positive individuals, including their health consequences and the role that they play in increasing likelihood of HIV transmission.

Strategy 16: Increase creative and innovative programming that is responsive to current community needs.

- Revitalize HIV prevention by experimenting with the use of new approaches, strategies, and messages in situations in which program or community-level evaluation shows evidence of decreasing effectiveness of existing interventions.
- Increase HIV prevention efforts tailored to the specific and current needs of target populations and subpopulations.
- Expand the scope of HIV prevention programs to address other relevant issues such as substance use, mental health, and STDs, either through providing services on site or

through referrals and referral follow-up.

- Increase the use of faith communities to deliver HIV prevention messages.
- Increase the use of role play and skills building exercises, such as negotiation of condom use, in HIV prevention curricula.

Strategy 17: Increase prevention efforts for potentially high-risk and emerging populations.

- Increase prevention efforts targeting gay and bisexual men who are new to San Francisco (e.g., establish a "welcome wagon" at the new gay community center that can refer people to testing and other prevention services).
- Increase programs for inmates and parolees that address situational homosexuality and their other unique prevention issues.
- Improve prevention efforts targeting HIV-negative and HIV-positive sex workers, for whom economic security may require engaging in risk behavior.
- Implement a process for identifying emerging populations at risk for HIV on a regular basis and improve San Francisco's capacity for rapid response.
- Increase the use of STD data for identification of emerging populations.

Strategy 18: Reduce barriers to accessing prevention and other health services among communities of color.

- Ensure culturally appropriate counseling and testing programs for people of color overall and specifically for African Americans and immigrants.

Strategy 19: Increase the efficiency with which prevention providers use research and data to improve programs.

- Explore new methods for making research and data available and accessible to providers.
- Increase technical assistance for HIV prevention providers and the HPPC concerning the use of data for program improvements and prevention planning.

Strategy 20: Increase community and provider knowledge about San Francisco venues where risk behaviors occur and how to design effective HIV prevention programs for these settings.

- Continue to conduct needs assessments among hard-to-reach groups to identify appropriate venues and intervention content for these groups.

## RESEARCH AND SURVEILLANCE

Strategy 21: Increase attention to the prevention needs of communities of color in research design, data collection, data analysis, and data presentations.

- Increase the representation of people of color in HIV prevention research studies.
- Improve the collection, analysis, and presentation of behavioral and epidemiologic data in San Francisco such that breakdowns of the data by race, age, and gender (including transgendered) are possible.
- Explore the dynamics of interracial sex and their effects on risk behavior.
- Fund a multi-city study in Northern California or California as a whole to look at HIV incidence and prevalence in communities of color for all BRPs.

Strategy 22: Increase research on the implications for HIV prevention of the recent dramatic demographic changes in San Francisco, including decreased availability of affordable housing, increased migration of individuals and families within San Francisco and out of San Francisco to more affordable locations in the Bay Area, and the sudden influx and outflux of persons in the high-tech industry.

Strategy 23: Include the HPPC more fully in the design and implementation of the HIV Consensus process, including discussions about the validity, strengths, and limitations of the data under consideration.

Strategy 24: Revise the collection and reporting of STD data to ensure that prevalence and inci-

dence among transgendered persons are separated from those of MSM and that BRP information is documented so that STD data can be used more effectively for HIV prevention planning.

## **COMMUNITY PLANNING, LINKAGES, AND COORDINATION**

Strategy 25: Develop new models for making effective use of non-population-based data in HIV prevention community planning (e.g., HIV testing data from all agencies).

Strategy 26: Increase the efficiency with which research and data are used by the HPPC for HIV prevention planning.

Strategy 27: Improve the quality and quantity of linkages among providers and researchers to facilitate the use of data by providers to improve prevention and to improve the relevance and inclusiveness of research efforts.

- Increase the number of SFDPH presentations to community-based organizations on epidemiologic, behavioral, and intervention research findings particular to agencies' tar-

get populations.

- Increase the dissemination of information about successful prevention strategies among communities and providers.

Strategy 28: Improve coordination and collaboration between HIV prevention and mental health, substance abuse, and STD detection and treatment services.

Strategy 29: Increase collaborative efforts between HIV prevention and care in the areas of service provision and community planning.

- Hold joint meetings with the HPPC and HIV Health Services Planning Council at least twice annually.
- Increase linkages between prevention for positives programs and care services.

Strategy 30: Increase regional prevention efforts.

- Hold joint meetings with the HPPC and other Northern California CPGs at least once annually.





## Chapter 2

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# NEEDS ASSESSMENT, RESOURCE INVENTORY, AND GAP ANALYSIS: FOCUSING OUR HIV PREVENTION EFFORTS





## CHAPTER OVERVIEW

**Section I: Introduction** provides a guide to reading this chapter, including a discussion of the limitations of the information presented here.

**Sections II - IX** review the HIV prevention needs for each BRP, the HIV prevention resources and services that exist for each BRP, and recommendations for improving prevention for each BRP, based on a comparison of the identified needs and the existing resources.

**Section X: HIV-Positive Individuals** reviews the HIV prevention needs of HIV-positive individuals and offers recommendations for improving prevention for positives.

**Section XI: Other HIV Prevention Needs** summarizes the research and data collection, technical assistance, and HIV prevention service system needs and how they are addressed.

## Section I: INTRODUCTION

This chapter contains a needs assessment, resource inventory, and gap analysis for each BRP. All epidemiologic data or information on population size presented in this chapter that are not accompanied by a reference citation are estimates taken from the HIV Consensus Meeting Report (SFDPH, 2001). (This report contains population size, prevalence, and incidence estimates derived from the results of several recent studies.) The needs assessment for each BRP describes the results of qualitative and quantitative studies that provide epidemiologic, social-cognitive, and risk behavior data relevant to that BRP. The resource inventory for each BRP lists programs, intervention types, funding source, and funding amounts that target that BRP. Resources are frequently changing as new programs are funded and others end; therefore, the resource inventories presented here represent the best estimate of the current allocation of resources. The final section, the gap analysis, identifies needed services and makes recommendations for improving prevention for each BRP.

All three sections draw on information and data presented in other parts of this Plan, including the Epidemiologic Profile. This chapter is also linked to the priority-setting process. In this chapter, BRP subpopulations with unique HIV prevention needs are described; those subpopulations for which at least one study has demonstrated an HIV prevalence of 8% or higher are prioritized in the Priority-Setting chapter to be guaranteed some level of funding. Finally, the gap analysis offers recommendations on the content of interventions; types of strategies, interventions, and behavioral theories available for designing HIV prevention programs are presented in the Strategies and Interventions chapter.

Several abbreviations are used in this chapter. The key to abbreviations can be found in the Guide to the Plan (pp. iv-viii).

## Section II: MSM AND MSM/F

### NEEDS ASSESSMENT

#### OVERALL NEEDS OF MSM AND MSM/F

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 46,800 MSM and MSM/F in San Francisco (not including IDUs), making up about 14.4% of the adult male population. It is estimated that 748 new HIV infections will occur among this group in 2001, representing 69.1% of all new infections. This constitutes an increase from a 1.04% incidence in 1997 to a 2.2% incidence in 2001. MSM and MSM/F also have a high burden of HIV disease, with an overall HIV prevalence of 27.3%. The highest prevalence of AIDS cases among MSM and MSM/F lies in the Castro, Noe Valley, Diamond Heights, Western Addition, and Tenderloin districts, indicating a continuing need for prevention services in these areas; however, MSM and MSM/F living with HIV and AIDS live in all areas of the City (Epidemiologic Profile, BRP map, p. 73). In addition to increases in HIV rates, rates of STDs such as syphilis, gonorrhea, and chlamydia have also increased among MSM and MSM/F nationwide. In San Francisco, rectal gonorrhea rates, which are good indicators of unprotected anal sex, have increased among MSM, from 1,609 cases in 1999 to 2,140 cases in 2000 (San Francisco Monthly STD Report, December 2000). However, it is not clear to what extent improved screening efforts have contributed to the increased numbers of diagnoses. Behaviors contributing to the high rates of infection include decreases in consistent condom use during anal sex, increases in unprotected anal sex, and increases in sex with multiple partners over the last three to five years (SFDPH, 2001). Evidence exists that such risk behaviors often occur with partners of unknown or known discordant serostatus (Ekstrand et al., 1999). Use of injection and non-injection drugs such as nitrite inhalants ("poppers"), speed, and cocaine, as well as other emerging recreational drugs

such as ecstasy and Viagra, also have been theorized or shown to be associated with sexual risk-taking among this population (Epidemiologic Profile, Co-factors, p. 95-97). Finally, even 20 years into the epidemic, although HIV/AIDS knowledge levels are generally high, low levels of HIV/AIDS knowledge may persist among some MSM populations in San Francisco and are associated with unprotected anal sex (Dilley et al., 1998).

#### UNIQUE NEEDS OF MSM AND MSM/F SUBPOPULATIONS

This section describes the specific needs of MSM and MSM/F subpopulations. The following subpopulations were found to have a prevalence greater than 8% in one or more studies, and thus are prioritized to be ensured funding (see Setting Priorities for HIV Prevention, pp. 116-118): African Americans, Asian/Pacific Islanders, Latinos, Native Americans, and Whites of all age groups; homeless and marginally housed youth and adults; and incarcerated individuals. African American, Latino, and White youth under 18 are also prioritized.

##### African American MSM and MSM/F

- *Estimated number living with HIV in 2001 in San Francisco: 1,023*
- *Estimated HIV prevalence: 54.6%*
- *Percent of all MSM and MSM/F: 4.0%*
- *Percent of all HIV-positive MSM and MSM/F: 8.0%*

Although African Americans represent a relatively small proportion of HIV cases among MSM and MSM/F, this group has the highest HIV prevalence of all MSM and MSM/F. Further, risks in this group may be improperly described or underestimated by HIV prevention agencies and researchers due to hesitancy of the population to disclose unsafe sexual activity or same-sex sexual activity (SFDPH, 1998a). Despite

these limitations in the information available, African American MSM report some of the highest rates of unprotected anal intercourse, second only to Latinos (SFDPH, 1998a). Lower use of highly-active anti-retroviral therapy (HAART) among African Americans living with AIDS may also contribute to a higher likelihood of infectiousness, and thus higher transmission rates, in sexual networks of African American MSM and MSM/F (SFDPH, 1998a), although the effects of HAART on infectiousness have not been conclusively established. Young African-American MSM and MSM/F between 15 and 22 in particular have the highest HIV prevalence in San Francisco for that age group, at 13.3% in one study (Katz et al., 1998).

### **Asian/Pacific Islander MSM and MSM/F**

- *Estimated number living with HIV in 2001 in San Francisco: 448*
- *Estimated HIV prevalence: 23.9%*
- *Percent of all MSM and MSM/F: 4.0%*
- *Percent of all HIV-positive MSM and MSM/F: 3.5%*

API MSM and MSM/F have one of the lowest prevalence rates of all ethnic groups, but it is still high at nearly 24%. Although this group is estimated to have the lowest rate of unprotected anal intercourse next to Whites, rates nevertheless range between 23% and 28% (SFDPH, 1998a). Young API MSM and MSM/F between 15 and 22 have a low HIV prevalence in San Francisco compared with youth from other ethnic groups at 1.8% in one study (Katz et al., 1998). Data on various API subgroups are not presented here; however, HIV prevalence, incidence, and risk behavior may differ between subgroups.

### **Latino MSM and MSM/F**

- *Estimated number living with HIV in 2001 in San Francisco: 1,611*
- *Estimated HIV prevalence: 34.4%*
- *Percent of all MSM and MSM/F: 10.0%*
- *Percent of all HIV-positive MSM and MSM/F: 12.6%*

Latino MSM and MSM/F have a moderate prevalence rate compared with other ethnic groups, but still high with more than one third being HIV-positive. The highest rates of unprotected anal intercourse are found among this group (40% to 52%) (SFDPH, 1998a), and may be influenced by psychosocial and cultural factors in this community, such as machismo, familismo, homophobia, and simpatica (Diaz, 1997). Young Latino MSM and MSM/F between 15 and 22 have a relatively high HIV prevalence in San Francisco at 5.6% in one study (Katz et al., 1998).

In Fall 2000, the HPPC prioritized immigrant Latino MSM and MSM/F for a needs assessment, and in Winter 2001, the needs assessment was conducted (Harder+Company Community Research, 2001). Due to non-random sampling and small sample size, results should be interpreted with caution, and are not necessarily generalizable to the population as a whole. Thirty-six Latino men predominantly from Mexico, but also from El Salvador, Guatemala, Honduras, Colombia, and Brazil were recruited from street and community settings in the Mission district and Civic Center area for interviews. Fourteen percent identified as heterosexual, 31% were bisexual, 56% were gay, 14% were married to a woman, and 6% reported being HIV-positive. In addition to their male partners, 36% reported having biological female partners, and 17% reported having MTF transgendered partners. Of the five men who identified as heterosexual, two reported having male casual partners, three reported having male sex work partners, and three reported having sex work partners who were transgendered. (It was not asked whether the men gave drugs/money for sex or received drugs/ money for sex.) The results revealed only a moderate degree of concern about HIV among the sample and the presence of substantial sexual but not injection drug-related risk behaviors.

Only slightly more than half the sample (56%) reported being somewhat or very concerned about HIV, with only 22% falling in the "very concerned" category. Fifty-three percent of the



<b>EXHIBIT 1. SEXUAL RISK BEHAVIORS OF LATINO IMMIGRANT MSM AND MSM/F</b>			
<i><b>Risk Behavior in Past Six Months</b></i>	<i><b>Sex with Male Main Partners: n (%)</b></i>	<i><b>Sex with Male Casual Partners: n (%)</b></i>	<i><b>Sex with Male Sex Worker Partners: n (%)</b></i>
Number/percent of men reporting any type of sex with each partner category (this number represents the denominator for those rows marked with *)	16 (44% of sample)	20 (56% of sample)	7 (19% of sample)
Number/percent reporting multiple partners*	4 (25%)	13 (65%)	5 (71%)
Number/percent reporting insertive anal sex*	15 (94%)	15 (75%)	6 (86%)
Of those who had insertive anal sex, number/percent who reported unprotected insertive anal sex	7 (47%)	9 (60%)	6 (100%)
Number/percent reporting receptive anal sex*	11 (69%)	12 (60%)	0 (0%)
Of those who had receptive anal sex, number/percent who reported unprotected receptive anal sex	7 (64%)	7 (58%)	-

\*The denominator is the number listed in the first row of the table.

sample had been tested for HIV; however, 35% of those who said they were somewhat or very concerned had never been tested. Two individuals said they were HIV-positive, and both acquired HIV from unprotected sex.

Regarding sex with other men, the respondents reported multiple risk behaviors (Exhibit 1). These findings are of concern. HIV prevalence among male partners of MSM and MSM/F is high in San Francisco (27.3% for MSM non-IDUs and 52.2% MSM-IDU), and therefore these men are likely to be exposed to HIV. In addition, men among this group who acquire HIV through sex with men may contribute to new infections among women and/or MTF transgendered individuals; the men in the sample reported low rates of consistent condom use with vaginal and anal sex with biological women, as well as with insertive anal sex with MTF. Receptive anal sex, the highest risk behavior, was reported by over half the sample, and consistent condom use with this type of sex was low.

Reasons for not using condoms were multifold, including sex doesn't feel as good with a condom, the other person preferred not to use condoms or didn't ask to use them, and it was casual sex so there wasn't time or opportunity to discuss or use condoms. One of the HIV-positive men stated that sometimes when he tells his partners his status, they still decline to use condoms. Drug use was moderate among the sample; the most common drugs cited were alcohol (92%), marijuana (47%), crack or cocaine (19%), poppers (8%), and speed (6%). No respondents reported injection drug use in the last three months.

Men were also asked about which types of HIV prevention services they would use. Men favored services provided by a doctor/health care agency, an HIV/AIDS-specialized agency, a Latino community organization, or an agency that serves gay/bisexual men. They also favored services provided by a man, services provided by someone within their community, a telephone service (e.g., hotline), one-on-one

face-to-face counseling, and anonymous HIV testing. Services favored least included those provided by a religious organization or a church, services provided by a woman, and confidential HIV testing. Respondents only moderately favored single or multiple session groups and outreach services, perhaps because of concerns about confidentiality. According to the respondents, bars, clubs, and other locations frequented by Latino immigrant MSM and MSM/F that may serve as outreach venues include: Esta Noche, Divas, Power Exchange, El Sarape, El Tin Tan, and Futura, but several men in the sample reported that they do not go to bars. Community locations where Latino men who have recently moved to the United States were recruited for this survey include Cesar Chavez Street, the Mission district, and the Civic Center area.

### **Native American MSM and MSM/F**

- *Estimated number living with HIV in 2001 in San Francisco: 51*
- *Estimated HIV prevalence: Cannot be estimated reliably*
- *Percent of all MSM and MSM/F: Cannot be estimated reliably*
- *Percent of all HIV-positive MSM and MSM/F: 0.4%*

Small population size precludes estimating overall HIV prevalence in this population. This group is estimated to have rates of unprotected anal intercourse of 20% to 45% (SFDPH, 1998a). Because documented HIV and AIDS prevalence in this community has been relatively low compared with other racial/ethnic groups, few studies have examined the specific HIV prevention needs of this subpopulation. However, San Francisco has the highest number of Native American AIDS cases in the nation (SFDPH, 1998a); therefore, this population is in need of prevention services.

### **White MSM and MSM/F**

- *Estimated number living with HIV in 2001 in San Francisco: 9,653*
- *Estimated HIV prevalence: 26.1%*

- *Percent of all MSM and MSM/F: 79.0%*
- *Percent of all HIV-positive MSM and MSM/F: 75.5%*

White MSM and MSM/F have the highest number of HIV cases of all racial/ethnic groups (partly because they have the largest population of MSM and MSM/F) but a lower overall prevalence than both Latinos and African Americans. Rates of unprotected anal intercourse remain high among this group at 15% to 32%. Although these are the lowest rates compared with other racial/ethnic groups (SFDPH, 1998a), data from outreach surveys demonstrate increases in unprotected anal intercourse and multiple partners across MSM and MSM/F of all racial/ethnic groups (SFDPH, 2001). Young White MSM and MSM/F between 15 and 22 in San Francisco had an HIV prevalence of 4.3% in one study (Katz et al., 1998).

### **Homeless and Marginally Housed Youth and Adult MSM and MSM/F**

Young homeless MSM and MSM/F have high HIV prevalence in San Francisco. Gay and bisexual male teens entering homeless youth centers had a staggering 52.3% HIV prevalence in another study (SFDPH, 1998b); however, this study may have oversampled HIV-positive individuals. Data from another study point to high seroprevalence among young homeless MSM and MSM/F, with individuals under 30 having an 11% prevalence and gay and bisexual males having a prevalence of 29.0% (Charlebois et al., 2000). Homeless youth also have high rates of injection drug use and having sex while under the influence of alcohol or drugs (Kral et al., 1998). The TREAT study also found homeless and marginally housed adults to have high prevalence rates: 24% for homeless and 41% for marginally housed (SFDPH, 1997, TREAT study data).

### **Incarcerated Individuals**

Incarceration and other forms of institutionalized living create unique conditions that may increase HIV risk. HIV risk among incarcerated populations is related to injection and non-

injection drug use both before and while in prison, and sexual activity in prisons is also a contributing factor (e.g., situational homosexuality, rape). (Epidemiologic Profile, Co-factors, pp. 100-101). One study found a prevalence of 19.4% among incarcerated MSM and MSM/F upon intake and an estimated incidence rate of 6.4% per year (Kim et al., 2001), indicating a need for prevention in this group, for both HIV-negative and HIV-positive incarcerated individuals.

### Youth Under 18

HIV prevalence among young MSM and MSM/F was estimated at 4.7% among 17 to 19 year olds, and at 7.1% for 20 to 22 year olds (Katz et al., 1998). Young African American, Latino, and White MSM and MSM/F between 15 and 22 have the highest prevalence rates: 13.3%, 5.6%, and 4.3%, respectively (Katz et al., 1998). African American, Latino, and White MSM and MSM/F under 18 are therefore highlighted in the priority-setting model and are guaranteed funding, along with other groups of youth. Young gay and bisexual men of all races have experienced the greatest increases in sexual risk behavior among all MSM and MSM/F (Epidemiologic Profile, Behavioral Studies, pp. 86-88), even though MSM and MSM/F over 25 have experienced the highest HIV incidence rates. In one study, homosexual and bisexual youth (including women) were found to lack skills to practice safer sex and to have high levels of risk behavior, with bisexual youth reporting low perceived risk and the highest risk behaviors (Rotheram-Borus et al., 1999).

## RESOURCE INVENTORY

MSM and MSM/F are widely targeted by HIV prevention programs in San Francisco, with a variety of interventions ranging from individually focused and small-group programs to community-wide campaigns (Exhibits 2 and 3), as well as counseling and testing services. The Prevention for HIV-Infected Persons Demonstration Project (PHIPP) targets HIV-positive MSM

and MSM/F (see Section X of this chapter, pp. 37-38).

## GAP ANALYSIS: IMPROVING HIV PREVENTION FOR MSM AND MSM/F

Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

### General

- Assess and address the reasons underlying the doubling of HIV infection rates since 1997 (e.g., effects of availability of highly active antiretroviral therapy [HAART], effects of drug advertising, effects of community norms, effects of other emerging issues such as barebacking).
- Increase attention to the role of injection, non-injection, and recreational drug use in sexual risk behavior.
- Improve the availability and accessibility of substance abuse treatment and mental health services.
- Decrease STD rates through improved availability, access, and referrals to STD detection and treatment.
- Improve linkages and coordination between
- HIV prevention and STD services. (For detailed recommendations, see CDC's Taking Action to Combat Increases in STDs and HIV Risk Among Men Who Have Sex with Men at [http://www.cdc.gov/nchstp/od/news/92288\\_AED\\_CDC\\_report-0427c.pdf](http://www.cdc.gov/nchstp/od/news/92288_AED_CDC_report-0427c.pdf)).
- Increase attention to the prevention needs of homeless and marginally housed individuals in all areas of the City, not just the Tenderloin, and youth of each race/ethnicity, given their noteworthy risk profiles in the needs assessment and the limitations of existing services in addressing their specific needs.
- Increase HIV prevention programs for HIV-



### EXHIBIT 2: CURRENT HIV PREVENTION CONTRACTS/MEMORANDA OF UNDERSTANDING (MOUs) TARGETING MSM AND MSM/F

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type*</i>
Aguilas	Latino	SSG
Asian Pacific Islander Wellness Center	API, monolingual	IRRC, Media, MSW, SSG, PCM, VBGO, VBIO
Bay Positives	HIV-positive youth	VBIO
Black Coalition on AIDS/ New Village	African American	MSW, SSG, VBGO
Black Coalition on AIDS-3 Street	African American	MSW, SSG, VBIO
SFDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Filipino Task Force on AIDS	Filipinos	PCM, SSG, VBGO
Glide	Tenderloin, low income	CTR/PCRS, PCM, SSG, VBIO
Haight Ashbury Free Clinic	Low income	CTR/PCRS, IRRC, PCM, VBIO
ICHO		VBIO
Instituto Familiar de la Raza	Mission, Latino, monolingual, Mission youth	IRRC, MSW, VBIO, VBGO
Larkin Street	Youth, homeless	IRRC, MSW, VBIO
LYRIC	Youth	SSG, MSW, VBGO
Mission Neighborhood Health Center	Mission, Latino, monolingual	IRRC, MSW
Proyecto Contra SIDA por Vida	Mission, Latino, Youth	IRRC, MSW, SSG, VBGO
Native American AIDS Project	Native American	SSG, VBGO, VBIO
San Francisco AIDS Foundation	All ethnicities with an African American component	Hotline, Media MSW, PCM, SSG, VBGO
SF City College	Community college students	CTR/PCRS
SFDPH-City Clinic	STDs	CTR/PCRS
San Francisco General Hospital	Low income	CTR/PCRS
SFDPH-WEDGE	In school youth (under 18)	MSW
SFDPH-Special Programs for Youth	Incarcerated youth	CTR/PCRS, SSG, IRRC
STOP AIDS Project	Youth component, HIV-positive component	Condom distribution, IRRC, MSW, SSG, VBGO, VBIO, Web-based outreach
Tenderloin AIDS Resource Center	Tenderloin, low income	Community Center, IRRC, MSW, SSG, VBGO, VBIO
UCSF/ AIDS Health Project		CTR/PCRS, IRRC, MSW, SSG

\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

### EXHIBIT 3. TOTAL ESTIMATED FUNDING LEVELS FOR MSM AND MSM/F\*

<i>BRP</i>	<i>Funding Amount</i>
MSM only	\$473,320
MSM and MSM-IDU	\$1,816,014
MSM, MSM-IDU, TSM, and TSM-IDU	\$1,441,141
All Males (MSM, MSF, MSM-IDU, MSF-IDU)	\$229,404
Multiple BRPs (includes MSM)	\$3,260,396
<b>TOTAL</b>	<b>\$7,220,275</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets MSM and MSM/F specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$7,220,275 targets MSM and MSM/F.

positive individuals, including those that focus on increasing awareness about their role in reducing new HIV infections and that provide skills training for discussing serostatus and negotiating condom use.

- Increase attention to the role that HIV-negative bottoms and HIV-positive tops can play in increasing consistent condom use and preventing new infections.
- Increase men's concern for their own health and well-being as well as that of their partners.
- Assess knowledge levels about HIV transmission and prevention methods among all target populations, especially youth, and design interventions that address gaps or misinformation.
- Increase the integration of HIV prevention with other important issues in these communities, such as men's health.
- Re-vitalize and re-invent HIV prevention media campaigns and other HIV prevention messages to re-focus attention on the HIV/AIDS issue.
- Address the unique needs and risks of heterosexually identified MSM (e.g., secret context of behavior, reluctance to discuss same-sex sexual activity).
- Acknowledge and dispel myths about HIV/AIDS proliferated by AIDS dissidents.

### **MSM and MSM/F of Color**

- Develop culturally appropriate risk assessments, data collection tools, and recruitment strategies for both HIV prevention programs and research studies that will more accurately assess risk levels.
- Address the role of psychosocial or cultural barriers, such as homophobia, to engaging in self-protective behaviors.

- Understand and address the dynamics of sexual partnerships between men of different racial/ethnic backgrounds that may affect the likelihood of engaging in self-protective behaviors.
- Increase epidemiologic and behavioral research among Native Americans.

### **Latino MSM and MSM/F**

- Increase street-based outreach conducted by Latino men as a vehicle for recruiting participants in one-on-one prevention services.
- Provide street-based counseling and testing services.
- Raise awareness and concern about HIV in the community.
- Increase individual perceptions of HIV risk.
- Educate medical providers about HIV risk in the Latino immigrant community such that they are equipped to provide appropriate education and referrals.
- Provide condom negotiation skills training, particularly for casual sexual encounters.

### **Young MSM and MSM/F**

- Increase attention to the specific needs of gay-identified youth versus bisexually identified youth, as their levels of knowledge and risk behaviors may be different.
- Ensure that young MSM and MSM/F have access to HIV prevention and other gay men's health resources.
- Understand and address the dynamics of sexual partnerships between men of different ages that may affect the likelihood of engaging in self-protective behaviors.

## Section III: TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, AND FST/F

This BRP includes transgendered individuals as well as people who have sex with transgendered individuals.

### NEEDS ASSESSMENT

#### NEEDS OF OVERALL MALE-TO-FEMALE (MTF) TSM, TSM/F, TSF, TST, TSM/T, AND TSF/T

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 2,160 MTF transgendered non-IDUs in San Francisco, making up less than 1% of the population. Despite the relatively small population size compared with other BRPs, it is estimated that 102 new HIV infections will occur among this group in 2001, representing 9.4% of all new infections and an annual incidence of 6.3%. MTF transgendered individuals also have a high burden of HIV disease, with an overall prevalence of 23.8%. Prevalence of AIDS cases among transgendered persons is concentrated in the Tenderloin area, indicating a continuing need for prevention services in this district (Epidemiologic Profile, BRP map, p. 74).

Behaviors contributing to the high rates of infection include both sexual and drug use risk behaviors, which are often related to social and economic hardships that result from discrimination against transgendered individuals. Such behaviors have been shown to be higher in this population than among gay and bisexual male populations in San Francisco (Nemoto et al., 1999a). Specific risks include high rates of sex work and unprotected receptive anal sex (Clements et al., 2001). Focus groups with transgendered individuals demonstrated that low self-esteem, economic necessity, and substance use were also issues (Clements et al., 1999). These groups identified lack of provider sensitivity to the unique needs of the transgen-

der community as barriers to HIV risk reduction (Clements et al., 1999). Finally, provider insensitivity, hesitancy to disclose or discuss transgender status with medical or social service providers, and linguistic and cultural factors contribute to barriers to accessing HIV prevention and health services for this population (Clements et al., 1999).

#### OVERALL NEEDS OF MST, MST/M, AND MST/F

In Fall 2000, the HPPC prioritized men who have sex with MTF transgendered persons (MST) for a needs assessment, and in Winter 2001, the needs assessment was conducted (Harder+Company Community Research, 2001). Due to non-random sampling and small sample size, results should be interpreted with caution, and are not necessarily generalizable to the population as a whole. Forty-three MST from diverse racial/ethnic backgrounds were recruited from street and community settings in the Mission district and the Tenderloin for interviews. Forty-four percent were heterosexual, 44% were bisexual, 7% were gay, 19% were married to a woman, and 27% reported being HIV-positive. In addition to their transgendered partners, 63% reported having biological female partners and 37% reported having non-transgendered male partners. The results revealed a high degree of concern about HIV in this group, but also the presence of sexual and drug-related risk behaviors.

Approximately 70% of the sample reported being somewhat or very concerned about HIV. All of those who said they were "very concerned" and all but one of those who said they were "somewhat concerned" had been tested for HIV. Eight individuals said they were HIV-positive. Explanations for how they became HIV-positive included blood transfusion, unprotected



ed sex with men or transgendered persons, unprotected sex and drug use, and sex work. Regarding sex with transgendered persons, the men reported several risk behaviors (Exhibit 4). These findings are of concern because the HIV prevalence among MTF in San Francisco is high (23.8% for non-IDUs and 63.9% for IDUs), and therefore these men are likely to be exposed to HIV. In addition, men who acquire HIV through sex with transgendered persons may contribute to new infections among the MTF transgendered population, as well as other populations. Only a few men reported receptive anal sex, the highest risk behavior, but condom use with this type of sex was sporadic. Reasons for not using condoms with transgendered partners were multifold, including both partners were HIV-positive, sex doesn't feel as good with a condom, spontaneity, both partners were drunk or high, the sexual encounters were just flings, and it is the sex worker's responsibility to protect the men. Non-injection and injection drug use were prevalent among the sample; the most common drugs cited were alcohol (72%), mari-

juana (67%), crack or cocaine (49%), speed (26%), and poppers (14%). In addition, lifetime injection drug use was 30% (n=13), 77% of this group had injected in the last 3 months (n=10), and 40% (n=4) of this group had shared needles in the last 3 months.

Men were also asked about which types of HIV prevention services they would use. Men favored services provided by a doctor/health care agency or an HIV/AIDS-specialized agency. They also favored single or multiple session workshops, telephone service (e.g., hotline), one-on-one face-to-face counseling, and anonymous HIV testing. Services favored least included those provided by a religious organization or a church and confidential HIV testing. Ironically, although only 30% reported that they would probably or definitely use services provided by an MTF transgendered person, and less than half (46.5%) said they would probably or definitely use outreach services, these two types of services were mentioned frequently when men were asked about how to reach MST

#### EXHIBIT 4. SEXUAL RISK BEHAVIORS OF MST

<i>Risk Behavior in Past Six Months</i>	<i>Sex with Transgendered Main Partners: n (%)</i>	<i>Sex with Transgendered Casual Partners: n (%)</i>	<i>Sex with Transgendered Sex Worker Partners: n (%)</i>
Number/percent of men reporting any type of sex with each partner category (this number represents the denominator for those rows marked with *)	22 (51% of sample)	16 (37% of sample)	19 (44% of sample)
Number/percent reporting multiple partners*	7 (32%)	11 (69%)	16 (84%)
Number/percent reporting insertive anal sex*	18 (82%)	12 (75%)	15 (79%)
Of those who had insertive anal sex, number/percent who reported unprotected insertive anal sex	8 (44%)	4 (33%)	11 (73%)
Number/percent reporting receptive anal sex*	5 (23%)	3 (19%)	2 (11%)
Of those who had receptive anal sex, number/percent who reported unprotected receptive anal sex	2 (40%)	2 (67%)	2 (100%)

for prevention. This may indicate a "theoretical" belief in the utility of these services for MST in general, but hesitancy about using these types of services themselves. Confidentiality was cited as a concern throughout the survey by many respondents and as such may contribute to the likelihood of an MST individual using a service. According to the respondents, bars, clubs, and other community locations frequented by MST that may serve as outreach venues include: Esta Noche, Divas, Power Exchange, Jezabel's, El Sarape, El Tin Tan, End Up, Pacific Hotel, Cannabis Club, and the Tenderloin area in general. Respondents were also recruited from some of these locations.

To supplement the interview data and to provide a different perspective, two focus groups were conducted with MTF, asking them about their male partners (boyfriends, husbands, casual partners, sex work clients, etc.). Despite the low frequency of receptive anal sex reported by the men who were interviewed, and despite another study that found insertive anal sex to be rare among a group of MTF (Clements et al., 2001), the transgendered individuals in both focus groups were in agreement that many (if not most) men have receptive anal sex with their transgendered partners, especially those who pay for sex.

Another common sentiment expressed in the focus groups was that it is each person's responsibility to protect themselves, and if the other person doesn't insist on condom use it's their own fault if they get HIV. The women also felt that most men were unconcerned about HIV, STDs, and condom use, often offering to pay more for not using condoms with transgendered sex workers and sometimes requesting unprotected sex with their transgendered girlfriends. This finding is in contrast to the relatively high levels of concern expressed by the men who were interviewed, perhaps due to sampling issues, or perhaps due to difference in levels of concern among different subgroups of MST.

The transgendered women also thought that the men would have sex without a condom even

if they knew their transgendered partner was HIV-positive, although they also stated that many transgendered sex workers do not tell their male partners if they are HIV-positive for fear that they would lose that income. Finally, when asked about how to do prevention for their male partners, the groups expressed skepticism that prevention could work for these men, particularly for those who are married with families and for whom the behavior is therefore secretive. Outreach and mass media strategies were identified as possible modes of prevention targeting the men, and one participant stated that financial incentives would motivate the men to get an HIV test. Finally, one group discussed the role of community empowerment and changing community norms among transgendered women. Greater respect for transgendered people in society and increased self-esteem among transgendered persons would help to promote and support a norm of condom use.

## UNIQUE NEEDS OF TRANSGENDERED SUBPOPULATIONS

This section describes the specific needs of transgendered subpopulations. Due to lack of definitive data on population size for racial/ethnic subgroups of transgendered persons, prevalence rates can not be estimated reliably. However, prevalence number estimates (the number of people living with HIV) are provided, and tentative estimates of population size as well as prevalence data from recent studies are given. The following TSM, TSM/F, TSF, TST, TSM/T, and TSF/T subpopulations were found to have a prevalence greater than 8% in one or more studies, and thus are prioritized to be ensured funding (see *Setting Priorities for HIV Prevention*, p. 116): MTF African Americans, MTF Asian/Pacific Islanders, MTF Latinas, MTF Native Americans, and MTF Whites.

### African American MTF

- *Estimated number living with HIV in 2001 in San Francisco: 510 (includes IDUs)*

- *Percent of all MTF: 27.0% (includes IDUs)*
- *Percent of all HIV-positive MTF: 48.6% (includes IDUs)*

African Americans in San Francisco are disproportionately represented among MTF living with HIV, with an HIV prevalence over twice as high than would be expected based on their numbers in the population. They also have a substantially higher prevalence than all other racial/ethnic groups - a staggering 63% in one study (Clements et al., 2001).

### **Asian and Pacific Islander MTF**

- *Estimated number living with HIV in 2001 in San Francisco: 105 (includes IDUs)*
- *Percent of all MTF: 13.0% (includes IDUs)*
- *Percent of all HIV-positive MTF: 10% (includes IDUs)*

API MTF represent a slightly lower proportion of HIV cases among MTF than would be expected, based on their numbers in the population, largely due to the overrepresentation among African Americans. Nevertheless, they have a high prevalence at 27% in one study (Clements et al., 2001), which is about the same as Latinas but higher than Whites and Native Americans.

### **Latina MTF**

- *Estimated number living with HIV in 2001 in San Francisco: 235 (includes IDUs)*
- *Percent of all MTF: 27.0% (includes IDUs)*
- *Percent of all HIV-positive MTF: 22.4% (includes IDUs)*

Latinas represent a slightly lower proportion of HIV cases among MTF than would be expected, based on their numbers in the population, largely due to the overrepresentation among African Americans. Nevertheless, they have a high prevalence at 29% in one study (Clements et al., 2001), which is about the same as API but higher than Whites and Native Americans.

### **Native American MTF**

- *Estimated number living with HIV in 2001 in San Francisco: Cannot be estimated reliably*

- *Percent of all MTF: 6.0% (includes IDUs)*
- *Percent of all HIV-positive MTF: Cannot be estimated reliably*

Because the numbers of HIV-positive Native American MTF cannot be determined reliably, it is not possible to say whether they are disproportionately affected by HIV compared with other racial/ethnic groups. Native American MTF had a prevalence of 20% in one study (Clements et al., 2001), which is about the same as Whites and lower than all the other races/ethnicities.

### **White MTF**

- *Estimated number living with HIV in 2001 in San Francisco: 178 (includes IDUs)*
- *Percent of all MTF: 27.0% (includes IDUs)*
- *Percent of all HIV-positive MTF: 17.0% (includes IDUs)*

Whites represent a lower proportion of HIV cases among MTF than would be expected, based on their numbers in the population, largely due to the overrepresentation among African Americans. Nevertheless, they have a high prevalence at 22% in one study (Clements et al., 2001), which is about the same as Native Americans and lower than all the other races/ethnicities.

### **Other Subpopulations (Not Prioritized)**

**Female-to-Male (FTM).** FTM transgendered individuals in San Francisco have a relatively low HIV prevalence compared with MTF, with only 2 individuals testing positive in a study of 123 FTM (1.6% prevalence) (Clements et al., 2001). Despite this low prevalence, the finding that there are HIV-positive individuals among this population warrants further study and consideration of prevention programs for this group. Further, FTM identifying as gay or bisexual frequently have a history of sex with gay men, indicating the possibility of increasing rates of infection in this population given the high prevalence of HIV among gay men in San Francisco (Clements et al., 2001).



## RESOURCE INVENTORY

MTF transgendered individuals are targeted by HIV prevention programs in San Francisco, with a variety of interventions ranging from individually focused and small-group programs to com-

munity-wide campaigns (Exhibits 5 and 6), as well as counseling and testing services. Although no agencies focus exclusively on transgendered persons, some do have transgender-specific programs that address the unique needs of this population.

### EXHIBIT 5: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING MTF TSM, TSM/F, TSF, TST, TSM/T, AND TSF/T\*

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type**</i>
Asian Pacific Islander Wellness Center	API, monolingual, transgender component	IRRC, Media, MSW, SSG, PCM, VBGO, VBIO, Training
Black Coalition on AIDS/New Village	African American	IRRC, MSW, VBGO
SFDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Instituto Familiar de la Raza	Mission, Latino, monolingual	IRRC, MSW, VBIO
LYRIC	Youth	SSG, MSW, VBGO
Proyecto Contra SIDA por Vida	Mission, Latina	IRRC, MSW, VBIO
Native American AIDS Project	Native American	SSG, VBGO, VBIO
San Francisco AIDS Foundation		Hotline
SF City College	Community college students	CTR/PCRS
SFDPH-City Clinic	STD patients	CTR/PCRS
San Francisco General Hospital	Low income	CTR/PCRS
Tenderloin AIDS Resource Center	Tenderloin, low income	IRRC, MSW, SSG, VBGO
UCSF/ AIDS Health Project		IRRC, MSW, SSG, CTR/PCRS
UCSF/Urban Health Study		CTR/PCRS, IRRC, SSG
Westside Community Mental Health		MSW

\*Although not all of these agencies continually provide services to transgendered persons, they can obtain services at these agencies anytime.

\*\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

### EXHIBIT 6. TOTAL ESTIMATED FUNDING LEVELS FOR MTF TSM, TSM/F, TSF, TST, TSM/T, AND TSF/T\*

<i>BRP</i>	<i>Funding Amount</i>
Transgendered, Transgendered-IDU	\$79,574
Transgendered, MSM, MSM-IDU, Transgendered-IDU	\$951,718
Transgendered, MSM	\$489,423
Multiple BRPs (includes Transgendered)	\$2,129,709
<b>TOTAL</b>	<b>\$3,650,424</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets MTF transgendered non-IDUs specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$3,650,424 targets MTF transgendered non-IDUs.

## **GAP ANALYSIS: IMPROVING HIV PREVENTION FOR TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, AND MST/F**

Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

### **General**

- Increase attention to the prevention needs of the following groups, given their noteworthy risk profiles in the needs assessment and the limitations of existing services in addressing their specific needs: African-American MTF, FTM, and male partners of MTF, both paying partners and other partners.
- Increase provider sensitivity to the unique needs of transgendered individuals (e.g., psychological, health-related), both MTF and FTM, using mechanisms such as provider trainings (Clements et al., 1999, Nemoto et al., 2001).
- Increase the use of a peer approach to service provision, in which transgendered persons conduct outreach and other interventions (Clements et al., 1999).
- Incorporate gender identity issues into risk reduction interventions (Clements et al., 1999).
- Expand the scope of interventions to address underlying issues such as lack of job training and self-esteem, as well as risk reduction skills related to condom use, condom negotiation skills, and safe hormone/drug injection (Clements et al., 1999).
- Design group interventions tailored to specific transgendered subpopulations, such as youth, FTM, and those who speak languages other than English (Clements et al., 1999).
- Increase the availability of support groups to provide a safe space for transgendered individuals to come together and discuss com-

mon issues (Clements et al., 1999).

- Develop transgender-specific HIV education, media, and referral materials in multiple languages, since materials for women and gay men are not relevant to the transgender community (Clements et al., 1999).
- Improve the availability and accessibility of substance abuse treatment and mental health services.
- Decrease STD rates through improved availability, access, and referrals to STD detection and treatment.
- Develop drug treatment and harm reduction interventions designed specifically for transgendered persons (Nemoto et al., 2001).
- Increase attention to diversity within the transgender community when designing interventions, such as differences in clients' age, ethnicity, and occupation (Nemoto et al., 2001).
- Support community building and community organizing in the transgender community (Nemoto et al., 2001).

### **Youth**

- Increase interventions targeting transgendered youth, since commercial sex work and substance use often begin at a young age. (Nemoto et al., 2001)
- Increase social support for transgendered youth (e.g., develop mentorship programs for transgendered people). (Nemoto et al., 2001)

### **HIV-positive**

- Increase HIV prevention programs for HIV-positive individuals, including those that focus on increasing awareness about their role in reducing new HIV infections and that provide skills training for discussing serostatus and negotiating condom use. (Clements et al., 1999)
- Improve primary medical care providers' sensitivity to and knowledge of transgender-specific HIV prevention and health issues. (Clements et al., 1999)
- Increase support groups for HIV-positive transgendered individuals to discuss the unique social, medical, and mental health

issues of this group that may affect HIV-related risk behaviors. (Clements et al., 1999)

### **MST, MST/M, and MST/F**

- Increase outreach targeting the male partners of transgendered sex workers. (Harder+Company Community Research, 2001)
- Develop mass media approaches to prevention (e.g., television, newspapers) to reach heterosexual men leading married or family lives who have sex with MTF transgendered persons outside of the marriage or primary partnership. (Harder+Company Community Research, 2001)
- Improve the thoroughness of risk assessments by asking all men about sex with transgendered partners. (Harder+Company Community Research, 2001)
- Increase interventions focusing on condom use and condom negotiation skills for insertive and receptive anal sex, especially for the male partners of transgendered sex workers. (Harder+Company Community Research, 2001)
- Increase men's concern for their own health and well-being as well as that of their partners. (Harder+Company Community Research, 2001)

## **Section IV: MSM-IDU AND MSM/F-IDU**

### **NEEDS ASSESSMENT**

#### **OVERALL NEEDS OF MSM-IDU AND MSM/F-IDU**

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 3,982 MSM-IDU and MSM/F-IDU in San Francisco, making up 7.8% of the total MSM, MSM/F population. It is estimated that 87 new HIV infections will occur among this group in 2001, representing 8.0% of all new infections. This constitutes an increase from a 1.99% incidence in 1997 to a 4.6% incidence in 2001. MSM-IDU and MSM/F-IDU also have a high burden of HIV disease, with an overall estimated prevalence of 52.2% among those who have ever had sex with a man and have ever injected drugs (SFDPH, 2001). One study estimated a prevalence of 59% among MSM-IDU who had sex with men and injected drugs in the past 12 months, and 35% of the HIV-infected men in the study were MSM-IDU (Fullilove et al., 1992). Prevalence of AIDS cases among MSM-IDU and MSM/F-IDU is concentrated in the Tenderloin, Western Addition, and Castro areas, indicating

a continuing need for prevention programs in these districts (Epidemiologic Profile, BRP map, p. 75). Despite the increases in infection rates among MSM-IDU and MSM/F-IDU, parallel increases are not found among heterosexual IDUs, indicating a unique set of risks for MSM-IDU and MSM/F-IDU that may be related to sexual behavior, non-injection drug use, or other factors specific to this population. Gay-identifying male injectors appear to have high rates of sexual risk taking, in addition to the compounding risks related to needle sharing, according to a community forum on MSM-IDU conducted in San Francisco in April 2000. Further, drug of choice, which is influenced by many social factors, impacts frequency and amount of drug use, which in turn affects the likelihood of sexual risk taking (e.g., use of nitrite inhalants, or poppers, have been shown to be associated with unsafe sex in several studies). Self-identity as gay and not as an IDU, or as an IDU but not gay, may also influence risk if prevention messages are not targeted appropriately. All the risk factors that apply to MSM and MSM/F who do not inject drugs are likely relevant for this population as well. (Epidemiologic Profile, Summary of Behavioral Studies, pp. 85-88)



## UNIQUE NEEDS OF MSM-IDU AND MSM/F-IDU SUBPOPULATIONS

This section describes the specific needs of MSM-IDU and MSM/F-IDU subpopulations to the extent possible. Due to lack of data on population size for racial/ethnic subgroups of MSM-IDU and MSM/F-IDU, prevalence rates can not be estimated reliably; however, prevalence number estimates (the number of people living with HIV) are given.

Because MSM-IDU and MSM/F-IDU are often included as a subpopulation in larger studies of MSM, MSM/F and IDU populations, the specific epidemiologic profile and prevention needs of racial/ethnic and other MSM-IDU and MSM/F-IDU subgroups are often not described in published studies. However, the following subpopulations are believed to have a prevalence greater than 8%, given that the prevalence is greater than 8% for these subgroups of MSM and MSM/F non-IDUs and based on the number believed to be living with HIV for each race/ethnicity derived from the 2001 consensus process. Thus, the following subpopulations are prioritized to be ensured funding (see Setting Priorities for HIV Prevention, pp. 116-118): African Americans, Asian/Pacific Islanders, Latinos, Native Americans, and Whites of all age groups; homeless and marginally housed youth and adults; and incarcerated individuals. African American, Latino, and White youth under 18 are also prioritized.

### African American MSM-IDU and MSM/F-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 387*
- *Percent of all HIV-positive MSM-IDU and MSM/F-IDU: 18.6%*

See also Section II in this chapter under African American MSM and MSM/F, pp. 8-9.

### Asian/Pacific Islander MSM-IDU and MSM/F-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 35*
- *Percent of all HIV-positive MSM-IDU and MSM/F-IDU: 1.7%*

See also Section II in this chapter under Asian/Pacific Islander MSM and MSM/F, pp. 9

### Latino MSM-IDU and MSM/F-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 226*
- *Percent of all HIV-positive MSM-IDU and MSM/F-IDU: 10.9%*

See also Section II in this chapter under Latino MSM and MSM/F, pp. 9-11.

### Native American MSM-IDU and MSM/F-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 22*
- *Percent of all HIV-positive MSM-IDU and MSM/F-IDU: 1.1%*

Several studies indicate that, compared with other racial/ethnic groups, MSM-IDU account for a greater proportion of AIDS cases among Native Americans (SFDPH, 1998a). See also Section II in this chapter under Native American MSM and MSM/F, pp. 11.

### White MSM-IDU and MSM/F-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 1,410*
- *Percent of all HIV-positive MSM-IDU and MSM/F-IDU: 67.8%*

See also Section II in this chapter under White MSM and MSM/F, pp. 11.

### Homeless and Marginally Housed Youth and Adult MSM-IDU and MSM/F-IDU

Gay and bisexual male IDU teens entering a homeless youth center had an HIV prevalence

of 67.5% in 1996 (SFPDPH, 1998a), although this study may have oversampled HIV-positive individuals. Another study (SFPDPH, 1997, TREAT study data) found a 31% prevalence among homeless MSM-IDU. See also Section II in this chapter under Homeless and Marginally Housed Youth and Adult MSM and MSM/F, p. 11.

### **Incarcerated Individuals**

One study found a prevalence of 21.6% among incarcerated MSM-IDU and MSM/F-IDU upon intake (Kim et al., 2001), indicating a need for prevention in this group, for both HIV-negative and HIV-positive incarcerated individuals. See also Section II in this chapter under Incarcerated Individuals, pp. 11-12.

### **Youth Under 18**

See Section II in this chapter, under Youth Under 18, p. 12.

## **RESOURCE INVENTORY**

No agencies currently target only MSM-IDU and MSM/F-IDU. This group is generally reached through programs targeting MSM and MSM/F (both non-IDUs and non-IDUs) or IDUs (male, female, and transgendered). Such programs include individually focused and small-group interventions, community-wide campaigns, counseling and testing services, and needle exchange (Exhibits 7 and 8).

### **EXHIBIT 7: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING MSM-IDU AND MSM/F-IDU**

<i><b>Agency</b></i>	<i><b>Subpopulations/Focus</b></i>	<i><b>Intervention Type*</b></i>
Asian Pacific Islander Wellness Center	API, monolingual	IRRC, Media, MSW, SSG, PCM, VBGO, VBIO
Black Coalition on AIDS/New Village	African American	MSW, SSG, VBGO
Black Coalition on AIDS-3 Street	African American	MSW, SSG, VBIO
CAL PEP	Tenderloin, 6th Street	SSG, VBIO
SFPDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Glide	Tenderloin, low income	CTR/PCRS, PCM, SSG, VBIO
Haight Ashbury Free Clinic	Low income	CTR/PCRS, IRRC, PCM, VBIO
ICHO		VBIO
Larkin Street	Youth, homeless	IRRC, MSW, VBIO
Native American AIDS Project	Native American	SSG, VBGO, VBIO
San Francisco AIDS Foundation/HIV Prevention Project	All ethnicities	Needle Exchange
SF City College	Community college students	CTR/PCRS
SFPDPH-City Clinic	STDs	CTR/PCRS
San Francisco General Hospital	Low income	CTR/PCRS
SFPDPH-Special Programs for Youth	Incarcerated youth	CTR/PCRS, SSG, IRRC
Stonewall	MSM, MSM-IDU speed users	MSW, Media
STOP AIDS Project	Youth component, HIV-positive component	Condom distribution, IRRC, MSW, SSG, VBGO, VBIO, Phone Cards, Web/Internet
Tenderloin AIDS Resource Center	Tenderloin, low income	IRRC, MSW, SSG, VBGO
UCSF/ AIDS Health Project		CTR/PCRS, IRRC, MSW, SSG
UCSF/Urban Health Study		CTR/PCRS, IRRC, SSG

\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

### EXHIBIT 8. TOTAL ESTIMATED FUNDING LEVELS FOR MSM-IDU AND MSM/F-IDU\*

<i>BRP</i>	<i>Funding Amount</i>
MSM-IDU, MSM only	\$1,816,014
Male IDUs (MSM-IDU, MSF-IDU)	\$229,404
MSM-IDU, MSM, TG, TG-IDU	\$510,574
All IDUs (MSM-IDU, MSF-IDU, TG-IDU, F-IDU)	\$258,702
Multiple BRPs (includes MSM-IDU)	\$3,362,039
<b>TOTAL</b>	<b>\$6,176,733</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets MSM-IDU and MSM/F-IDU specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$6,176,733 targets MSM-IDU and MSM/F-IDU.

## GAP ANALYSIS: IMPROVING HIV PREVENTION FOR MSM-IDU AND MSM/F-IDU

Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

- Increase HIV prevention programs for HIV-positive individuals, including those that focus on increasing awareness about their role in reducing new HIV infections and that provide skills training for discussing serostatus and negotiating condom use.
- Increase attention to understanding and addressing the unique needs and risks of this population that are different than those of MSM and other IDUs, including the interaction between drug-related risks and sexual risks.
- Increase attention to identity issues among this population (i.e., a person may be an MSM and an IDU but only consider themselves one or the other) with the goal of developing appropriate interventions that address the spectrum of possible risks for these individuals within the context of their self-identification.
- Provide needle exchange specifically for

MSM-IDU and MSM/F IDU (MSM-IDU Community Forum, 2000).

- Improve integration of prevention, social, medical, and other services for this population (MSM-IDU Community Forum, 2000).
- Intensify the harm reduction component of programs for MSM-IDU and MSM/F-IDU (MSM-IDU Community Forum, 2000).
- Increase provider sensitivity to and awareness of issues particular to this population (MSM-IDU Community Forum, 2000).
- Challenge community norms and community education strategies (MSM-IDU Community Forum, 2000).
- Increase the collection and reporting of risk behavior and epidemiologic data specific to MSM-IDU and MSM/F-IDU to inform prevention efforts specific to this population.
- Address the reasons behind continued sharing of injection equipment among those who have not yet adopted any harm reduction practices.
- Incorporate interventions that address the social and economic factors that contribute to drug use and needle sharing into HIV prevention efforts.
- Improve the availability and accessibility of substance abuse treatment and mental health services.
- Decrease STD rates through improved availability, access, and referrals to STD detection and treatment.



## Section V: FSM-IDU, FSM/F-IDU, AND FSF-IDU

### NEEDS ASSESSMENT

#### OVERALL NEEDS OF FSM-IDU, FSM/F-IDU, AND FSF-IDU

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 4,850 female IDUs in San Francisco. It is estimated that 48 new HIV infections will occur among this group in 2001, representing 4.4% of all new infections at an annual incidence of 1.1%. Female IDUs are estimated to have an HIV prevalence of 10%, which is substantial but lower than all other BRPs except FSM, FSM/F, FSF, and MSE. Prevalence of AIDS cases is concentrated mainly in the Tenderloin, indicating a need for prevention efforts in this district (Epidemiologic Profile, BRP map, p. 76). In summary, incidence has remained relatively low in this population, and prevalence has remained stable due to long-standing needle exchange programs in San Francisco (SFDPH, 1997, Urban Health Study data). Injection drug use continues to be the primary risk factor in this population, but use of drugs such as crack, cocaine, and alcohol continues to lead to sexual risk behaviors as well (Epidemiologic Profile, Summary of Behavioral Studies, pp. 85-86). One study among lesbian IDUs in 19 U.S. cities identified high rates of sexual risk behavior (unprotected sex with men and women) and injection drug use (Kral et al., 1997). This finding is noteworthy because the likelihood of female-to-female HIV transmission is thought to be low; therefore, lesbians are not considered to be a high-risk group. However, this study indicates that even women who identify as lesbian may still have sex with men, including unprotected anal and vaginal sex. This may explain the Urban Health Study finding that lesbian IDUs had a higher HIV prevalence than bisexual or heterosexual IDUs (20.0%, compared with 17.4% and 10.7%, respectively) (SFDPH, 1997, Urban Health Study data).

#### UNIQUE NEEDS OF FSM-IDU, FSM/F-IDU, AND FSF-IDU SUBPOPULATIONS

This section describes the specific needs of FSM-IDU, FSM/F-IDU, and FSF-IDU subpopulations. Due to lack of data on population size for racial/ethnic subgroups of female IDUs, prevalence rates can not be estimated reliably; however, prevalence number estimates (the number of people living with HIV) are given. The following subpopulations were found to have a prevalence greater than 8% in one or more studies, and thus are prioritized to be ensured funding (see Setting Priorities for HIV Prevention, pp. 116-118): African Americans and Latinas of all age groups.

##### African American FSM-IDU, FSM/F-IDU, and FSF-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 254*
- *Percent of all HIV-positive FSM-IDU, FSM/F-IDU, FSF-IDU: 52.4%*

African American female IDUs are disproportionately affected by HIV compared with other racial/ethnic groups, making up more than half of the female IDU HIV cases in San Francisco. In addition, one study found a 14.3% prevalence among African American female IDUs, second only to prevalence among Latinas (Watters, 1994).

##### Latina FSM-IDU, FSM/F-IDU, and FSF-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 53*
- *Percent of all HIV-positive FSM-IDU, FSM/F-IDU, FSF-IDU: 10.9%*

One study found a 15.4% prevalence among Latina IDUs, the highest prevalence of any racial/ethnic group (Watters, 1994). Latinas represent approximately one tenth of all female

IDU HIV cases in San Francisco.

### Other Subpopulations (Not Prioritized)

**Asian/Pacific Islander FSM-IDU, FSM/F-IDU, and FSF-IDU.** It is estimated that there are 19 API female IDUs living with HIV in San Francisco in 2001, making up 3.9% of all the female IDU HIV cases.

**Native American FSM-IDU, FSM/F-IDU, and FSF-IDU.** It is estimated that there are 9 Native American female IDUs living with HIV in San Francisco in 2001, making up 1.9% of all the female IDU HIV cases.

**White FSM-IDU, FSM/F-IDU, and FSF-IDU.** It is estimated that there are 150 White female IDUs living with HIV in San Francisco in 2001, making up 30.9% of all the female IDU HIV

cases. One study found a 5.7% prevalence among White female IDUs, the lowest prevalence of any racial/ethnic group (Watters, 1994). However, White women make up nearly one third of HIV-positive female IDUs, second only to African-American women.

## RESOURCE INVENTORY

No agencies currently target only female IDUs. This group is generally reached through programs targeting females in general (both IDUs and non-IDUs) or IDUs in general (male, female, and transgendered). Such programs include individually focused and small-group interventions, community-wide campaigns, counseling and testing services, and needle exchange (Exhibits 9 and 10).

### EXHIBIT 9: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING FSM-IDU, FSM/F-IDU, AND FSF-IDU

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type*</i>
SFDPH-Bureau Family Health	Low income	CTR/PCRS
CAL PEP	Tenderloin, 6th Street	SSG, VBIO
SFDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Glide	FSM-IDU	CTR/PCRS
Haight Ashbury Free Clinic	Low income	CTR/PCRS, IRR, PCM, VBIO
ICHO		IRR, MSW, VBIO
Iris Center	Low income	IRR, MSW, SSG, VBGO, VBIO
Larkin Street	Homeless, youth	IRR, MSW, VBIO
Native American AIDS Project	Native American	SSG, VBGO, VBIO
San Francisco AIDS Foundation/HIV Prevention Project		Needle Exchange
San Francisco AIDS Foundation		Hotline
SF City College	Community college students	CTR/PCRS
SFDPH-City Clinic	STDs	CTR/PCRS
San Francisco General Hospital	Low income	CTR/PCRS
SFDPH-Special Programs for Youth	Incarcerated youth	CTR/PCRS, SSG, IRR
Tenderloin AIDS Resource Center	Tenderloin, low income	IRR, MSW, SSG, VBGO, VBIO
UCSF/ AIDS Health Project		CTR/PCRS
UCSF/Urban Health Study		CTR/PCRS, IRR, SSG
Westside		MSW

\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

### EXHIBIT 10. TOTAL ESTIMATED FUNDING LEVELS FOR FSM-IDU, FSM/F-IDU, AND FSF-IDU \*

<i>BRP</i>	<i>Funding Amount</i>
Female IDUs only	\$0
All IDUs	\$1,531,459
All Females	\$377,230
Multiple BRPs (includes F-IDU)	\$3,065,355
<b>TOTAL</b>	<b>\$4,974,044</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets FSM-IDU, FSM/F-IDU, and FSF-IDU specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$4,974,044 targets FSM-IDU, FSM/F-IDU, and FSF-IDU.

## GAP ANALYSIS: IMPROVING HIV PREVENTION FOR FSM-IDU, FSM/F-IDU, AND FSF-IDU

Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

- Increase attention to the prevention needs of the following groups, given their noteworthy risk profiles in the needs assessment and the limitations of existing services in addressing their specific needs: African-American and Latina FSM-IDU, FSM/F-IDU, and FSF-IDU.
- Increase HIV prevention programs for HIV-positive individuals, including those that focus on increasing awareness about their role in reducing new HIV infections, those that provide skills training for discussing serostatus and negotiating condom use, and

those that focus on risks related to sharing of injection equipment.

- Address the risks related to unprotected sex with men among lesbian- and bisexual-identifying female IDUs who have sex with men.
- Address the reasons behind continued sharing of injection equipment among those who have not yet adopted any harm reduction practices.
- Increase consideration of the unique needs of women using needle exchange (e.g., fear of having their children taken away).
- Incorporate interventions that address the social and economic factors that contribute to drug use and needle sharing into HIV prevention efforts.
- Improve the availability and accessibility of substance abuse treatment and mental health services.
- Decrease STD rates through improved availability, access, and referrals to STD detection and treatment.



## Section VI: MSF-IDU

### NEEDS ASSESSMENT

#### OVERALL NEEDS OF MSF-IDU

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 9,000 heterosexual male IDUs in San Francisco. It is estimated that 45 new HIV infections will occur among this group in 2001, representing 4.2% of all new infections. The annual incidence is estimated at 0.6%, a decrease from the 1997 incidence of 1.0%. MSF-IDU are estimated to have an HIV prevalence of 10%, the same as female IDUs. This prevalence is substantial, but is lower than all other BRPs, except FSM, FSM/F, FSF, and MSF. Prevalence of AIDS cases is concentrated in the Tenderloin and the Bayview, indicating a need for prevention services in these areas (Epidemiologic Profile, BRP map, p. 77). As with female IDUs, incidence has remained relatively low among MSF-IDU, and prevalence has remained stable due to the long-standing needle exchange programs in San Francisco. Injection drug use continues to be the primary risk factor in this population, but use of drugs such as crack, cocaine, and alcohol continues to lead to sexual risk behaviors among this population (Epidemiologic Profile, Summary of Behavioral Studies, pp. 85-86). Because heterosexual transmission of HIV is more efficient from male to female than from female to male, the risk of a man acquiring HIV from a woman via sexual contact is relatively low; however, the risk of transmitting HIV to a female partner is comparatively high. Therefore, prevention for this group needs to take into account the risks to the female partners of MSF-IDU.

#### UNIQUE NEEDS OF MSF-IDU SUBPOPULATIONS

This section describes the specific needs of MSF-IDU subpopulations. Due to lack of data

on population size for racial/ethnic subgroups of MSF-IDU, prevalence rates can not be estimated reliably; however, prevalence number estimates (the number of people living with HIV), are given. The following subpopulations were found to have a prevalence greater than 8% in one or more studies, and thus are prioritized to be ensured funding (see Setting Priorities for HIV Prevention, pp. 116-118): African Americans and Whites of all age groups.

##### African American MSF-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 424*
- *Percent of all HIV-positive MSF-IDU: 47.1%*

African American MSF-IDU, like female IDUs, are disproportionately affected by HIV compared with other racial/ethnic groups, making up nearly half of the HIV-positive MSF-IDU. African American MSM-IDU were also found to have an HIV prevalence of 8.0% in the Urban Health Study (Kral, 2001).

##### White MSF-IDU

- *Estimated number living with HIV in 2001 in San Francisco: 331*
- *Percent of all HIV-positive MSF-IDU: 36.8%*

White MSF-IDU make up over one third of HIV cases among MSF-IDU and had a prevalence of 14% in the Urban Health Study (Kral, 2001).

##### Other Subpopulations (Not Prioritized)

**Asian/Pacific Islander MSF-IDU.** It is estimated that there are 19 API MSF-IDU living with HIV in San Francisco, making up 2.1% of the total HIV cases among MSF-IDU.

**Latino MSF-IDU.** It is estimated that there are 116 Latino MSF-IDU living with HIV in San Francisco, making up 12.9% of the total HIV cases among MSF-IDU.

**Native American MSF-IDU.** It is estimated that there are 10 Native American MSF-IDU living with HIV in San Francisco, making up 1.1% of the total HIV cases among MSF-IDU.

**Homeless and Marginally Housed MSF-IDU.** Homeless and marginally housed MSF-IDU were estimated to have an HIV prevalence of approximately 6.4% in the TREAT study (SFDPH, 1997, TREAT study data). In addition, youth in this population have a high prevalence at 25.0% in a study of teens entering homeless youth centers (SFDPH, 1998b), although this study likely oversampled HIV-positive individuals.

## RESOURCE INVENTORY

No agencies currently provide services specifically for MSF-IDU; services target either male IDUs in general (MSM-IDU, MSM/F-IDU, and MSF-IDU) or IDUs in general (male, female, and transgendered). Such programs include individually focused and small-group interventions,

community-wide campaigns, counseling and testing services, and needle exchange (Exhibits 11 and 12).

## GAP ANALYSIS: IMPROVING HIV PREVENTION FOR MSF-IDU

Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

- Increase attention to the prevention needs of African Americans, given their noteworthy risk profiles in the needs assessment and the limitations of existing services in addressing their specific needs.
- Increase HIV prevention programs for HIV-positive individuals, including those that focus on increasing awareness about their role in reducing new HIV infections, those

### EXHIBIT 11: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING MSF-IDU

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type*</i>
Black Coalition on AIDS-3 Street		MSW, SSG, VBIO
SFDPH-Bureau Family Health	Low income	CTR/PCRS
CAL PEP	Tenderloin, 6th Street	SSG, VBIO
SFDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Glide	Tenderloin, low income	CTR/PCRS, PCM, SSG, VBIO
Haight Ashbury Free Clinic	Low income	CTR/PCRS, IRR, PCM, VBIO
ICHO		VBIO
Larkin Street	Youth, homeless	IRR, MSW, VBIO
Proyecto Contra SIDA por Vida	Mission, Latina	IRR, MSW, SSG, VBIO
San Francisco AIDS Foundation/HIV Prevention Project		Needle Exchange
San Francisco AIDS Foundation		Hotline
SF City College	Community college students	CTR/PCRS
SFDPH-City Clinic	STDs	CTR/PCRS
San Francisco General Hospital	Low income	CTR/PCRS
SFDPH-Special Programs for Youth	Incarcerated youth	CTR/PCRS, SSG, IRR
UCSF/ AIDS Health Project		CTR/PCRS
UCSF/Urban Health Study		CTR/PCRS, IRR, SSG

\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii

<b>EXHIBIT 12. TOTAL ESTIMATED FUNDING LEVELS FOR MSF-IDU*</b>	
<b>BRP</b>	<b>Funding Amount</b>
MSF-IDU only	\$0
Male IDUs (MSF-IDU, MSM-IDU)	\$50,363
All IDUs	\$1,481,276
All Males	\$229,404
Multiple BRPs (includes MSF-IDU)	\$2,713,440
<b>TOTAL</b>	<b>\$4,474,483</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets MSF-IDU specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$4,474,483 targets MSF-IDU.

that provide skills training for discussing serostatus and negotiating condom use, and those that focus on risks related to sharing of injection equipment.

- Address the reasons behind continued sharing of injection equipment among those who have not yet adopted harm reduction practices.
- Increase the focus on increasing condom

use to protect not only oneself, but also one's female partners.

- Improve the availability and accessibility of substance abuse treatment and mental health services.
- Decrease STD rates through improved availability, access, and referrals to STD detection and treatment.

## **Section VII: TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F-IDU, FST-IDU, FST/M-IDU, AND FST/F-IDU**

### **NEEDS ASSESSMENT**

#### **OVERALL NEEDS OF MTF TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, AND TSF/T-IDU**

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 840 MTF transgendered IDUs in San Francisco. It is estimated that 40 new HIV infections will occur among this group in 2001, representing 3.7% of all new infections. The annual estimated incidence in this population is the highest of all the BRPs, at 13.2%. MTF transgendered IDUs also have an extremely high burden of HIV disease, with an overall prevalence of 63.9% among those who reported ever injecting drugs,

not including hormones. Prevalence of AIDS cases is concentrated in the Tenderloin, indicating a need for prevention services in this area (Epidemiologic Profile, BRP map, p. 74). All of the risk factors and behaviors described for transgendered non-IDUs (pp. 15-18) also apply to transgendered IDUs, including sexual and drug use risk behaviors, low self-esteem, lack of provider sensitivity, and barriers to accessing HIV prevention and health services. The interplay between drug addiction and sex work is particularly salient for this population (Clements et al., 1999). Transgendered IDUs who are sex workers may share needles with customers who are willing to pay more for shooting up together (Nemoto et al., 1999b). Further, speed use among transgendered IDU sex workers is high, and their social networks



tend to be composed of other transgendered IDU sex workers, perhaps contributing to HIV transmission within the group (Nemoto et al., 1999b). Needle sharing is also high among this group; of MTF reporting a history of injection drug use, 63% reported ever sharing syringes and 47% of those who injected in the last six months had shared syringes (Clements et al., 2001). In the same study, hormone injection was common among MTF (31% of one sample reported hormone injection in the past six months). However, most individuals obtained hormone needles from a safe and reliable source, such as a clinic or a needle exchange site, and only three individuals reported recent hormone needle sharing (Clements et al., 2001).

### **UNIQUE NEEDS OF MTF TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, AND TSF/T-IDU SUBPOPULATIONS**

This section describes the specific needs of transgendered IDU subpopulations. Because only a few studies have examined prevalence and incidence among transgendered populations, rates among transgendered IDU racial/ethnic and other subpopulations have not yet been assessed. However, prevalence number estimates (the number of people living with HIV) are given. The following TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, and TSF/T-IDU subpopulations are thought to have a prevalence greater than 8%, based on the high prevalence among transgendered non-IDUs, and thus are prioritized to be ensured funding (see Setting Priorities for HIV Prevention, pp. 116): MTF African Americans, MTF Asian/Pacific Islanders, MTF Latinas, MTF Native Americans, and MTF Whites.

#### **African American MTF IDUs**

- *Estimated number living with HIV in 2001 in San Francisco: 510 (includes non-IDUs)*
- *Percent of all HIV-positive MTF: 48.6% (includes non-IDUs)*

African American MTF in San Francisco, including IDUs, have a substantially higher prevalence than all other racial/ethnic groups - a staggering 63% in one study (Clements et al., 2001).

#### **Asian and Pacific Islander MTF IDUs**

- *Estimated number living with HIV in 2001 in San Francisco: 105 (includes non-IDUs)*
- *Percent of all HIV-positive MTF: 10% (includes non-IDUs)*

API MTF, including IDUs, had a prevalence of 27% in one study (Clements et al., 2001), about the same as Latinas but higher than Whites and Native Americans.

#### **Latina MTF IDUs**

- *Estimated number living with HIV in 2001 in San Francisco: 235 (includes non-IDUs)*
- *Percent of all HIV-positive MTF: 22.4% (includes non-IDUs)*

Latina MTF, including IDUs, had a prevalence of 29% in one study (Clements et al., 2001), about the same as API but higher than Whites and Native Americans.

#### **Native American MTF IDUs**

- *Estimated number living with HIV in 2001 in San Francisco: cannot be estimated reliably*
- *Percent of all HIV-positive MTF IDUs: cannot be estimated reliably*

Native American MTF, including IDUs, had a prevalence of 20% in one study (Clements et al., 2001), about the same as Whites and lower than all the other races/ethnicities.

#### **White MTF IDUs**

- *Estimated number living with HIV in 2001 in San Francisco: 178 (includes non-IDUs)*
- *Percent of all HIV-positive MTF: 17.0% (includes non-IDUs)*

White MTF, including IDUs, had a prevalence of 22% in one study (Clements et al., 2001), about the same as Native Americans and lower than

all the other races/ethnicities.

### Other Subpopulations (Not Prioritized)

**FTM IDUs.** Although lifetime injection of street drugs among FTM (18% in one sample) is low compared with MTF, 91% of the FTM transgendered IDUs in this sample reported having ever shared needles in their lives (Clements et al., 2001). Only 4% (n=5) reported injection of street drugs in the last six months, but four of the five individuals reported sharing syringes or injection equipment (Clements et al., 2001).

## RESOURCE INVENTORY

MTF transgendered IDUs are widely targeted with HIV prevention programs in San Francisco, with a variety of interventions including individually focused and small-group programs, community-wide campaigns, counseling and testing services, and needle exchange (Exhibits 13 and 14). Although no agencies focus exclu-

sively on transgendered IDUs, some do have transgender-specific programs that address the unique needs of this population.

## GAP ANALYSIS: IMPROVING HIV PREVENTION FOR TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, AND TSF/T-IDU

Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

### General

- Address the interplay of drug-related and sex-related risks, especially among trans-

### EXHIBIT 13: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING MTF TRANSGENERED IDUs\*

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type**</i>
Asian Pacific Islander Wellness Center	API, monolingual	IRRC, Media, MSW, SSG, PCM, VBGO, VBIO, Training
Black Coalition on AIDS/New Village	African American	MSW, SSG, VBGO, VBIO
SFDPH-Bureau Family Health	Low income	CTR/PCRS
SFDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Proyecto Contra SIDA por Vida	Mission, Latina	IRRC, MSW, VBIO
Native American AIDS Project	Native American	SSG, VBGO, VBIO
San Francisco AIDS Foundation/HIV Prevention Project		Needle Exchange
San Francisco AIDS Foundation	All ethnicities with an African American component	MSW, PCM, SSG, VBGO, Media, Hotline
SF City College	Community college students	CTR/PCRS
SFDPH-City Clinic	STDs	CTR/PCRS
San Francisco General Hospital	Low income	CTR/PCRS
Tenderloin AIDS Resource Center	Tenderloin, low-income	MSW, VBGO
UCSF/ AIDS Health Project		CTR/PCRS, IRRC
Westside		MSW

\*Although not all of these agencies continually provide services to transgendered persons, they may obtain services at these agencies at any time.

\*\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

### EXHIBIT 14. TOTAL ESTIMATED FUNDING LEVELS FOR MTF TRANSGENDERED IDUs\*

<i>BRP</i>	<i>Funding Amount</i>
Transgendered-IDU, Transgendered only	\$79,574
Transgendered, MSM, MSM-IDU, Transgendered-IDU	\$951,718
All IDUs (TG-IDU, F-IDU, MSM-IDU, MSF-IDU)	\$831,355
Multiple BRPs (includes Transgendered-IDU)	\$2,257,122
<b>TOTAL</b>	<b>\$4,119,769</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets MTF IDUs specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$4,119,769 targets MTF IDUs.

gendered sex workers and their social networks.

- See Section III, Gap Analysis, p. 20.

#### **HIV-positive**

- See Section III, Gap Analysis, pp. 20-21.

#### **Youth**

- See Section III, Gap Analysis, p. 20.

#### **Male Partners of MTF Transgendered IDUs**

- See Section III, Gap Analysis, p. 21.

## Section VIII: FSM, FSM/F, AND FSF

### NEEDS ASSESSMENT

#### **OVERALL NEEDS OF FSM, FSM/F, AND FSF**

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 326,601 FSM and FSM/F in San Francisco, but only 5,000 of these women are considered to be at risk for HIV. It is estimated that 10 new HIV infections will occur among this group in 2001, representing 0.9% of all new infections. Incidence in this population remains very low at less than 0.1% per year. The primary risk factors for FSM, FSM/F, and FSF who do not inject drugs are unprotected sex with multiple male partners, high-risk male partners, or male partners outside of a primary relationship (Epidemiologic Profile, Summary of Behavioral Studies, p. 88-89). Some women may have sex with men who also have sex with men or who inject drugs, placing the woman at greater risk for HIV and STDs (Epidemiologic Profile, Summary of Behavioral Studies, p. 88-89). It is documented that lesbian-identified women

report having sex with men, and sometimes gay men, thus challenging the traditional assumption that lesbians are a very low risk group (Epidemiologic Profile, Summary of Behavioral Studies, pp. 88-89). In addition, non-injection drug use among women may lead to sexual risk-taking (Epidemiologic Profile, Summary of Behavioral Studies, pp. 88-89). A history of abuse may influence sexual risk taking later in life among women (Epidemiology Chapter, Co-factors, pp. 92-93). Finally, recent evidence suggests that heterosexual men and women may believe that HAART reduces HIV transmissibility, possibly affecting risk behaviors (van der Straten et al., 1998).

#### **UNIQUE NEEDS OF FSM, FSM/F, AND FSF SUBPOPULATIONS**

No female subpopulations were found to have a prevalence greater than 8% in any study, and thus no specific subgroups are prioritized to be ensured funding. However, it should be noted that African American women (and men) have



the highest rates of chlamydia, gonorrhea, and syphilis, three times the rate of women with the next highest rates. African American female youth under 20 are even more disproportionately affected, with chlamydia and gonorrhea rates over 3.5 times the average rate for the City as a whole, and six to eight times the rates for the ethnic group with the next highest rates. In addition, although a history of childhood sexual abuse is a salient factor for all women in terms of HIV risk later in life, African American women were highlighted in a recent study (Wingood and DiClemente, 1997a). In this study, a history of childhood sexual abuse among African American women was found to be associated with sexual risk-taking later in life (Wingood and DiClemente, 1997a). In addition, African American women in abusive relationships were found to be less likely to use condoms than other racial/ethnic groups and more likely to experience verbal abuse or the threat of physical abuse when they used condoms (Wingood and DiClemente, 1997b). These issues may point to African American women and female adolescents as an emerging popula-

tion at risk for increasing rates of HIV infection, although more research and surveillance is needed.

## RESOURCE INVENTORY

Some agencies currently focus on prevention solely for females, and others have programs that target only females. Such programs include individually focused and small-group interventions, community-wide campaigns, and counseling and testing services (Exhibits 15 and 16).

## GAP ANALYSIS: IMPROVING HIV PREVENTION FOR FSM, FSM/F, AND FSF

Based on a comparison of the needs assessment and the resource inventory, the following rec-

**EXHIBIT 15: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING  
FSM, FSM/F, AND FSF**

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type*</i>
Black Coalition on AIDS-3 Street	African American	MSW, SSG, VBIO
SFDPH-Bureau Family Health	Low income	CTR/PCRS
CAL PEP	Low-income, Bayview/Hunters Point, Western Addition, Potrero Hill	SSG, VBIO
SFDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Haight Ashbury Free Clinic	Low income	CTR/PCRS, PCM, VBIO
Instituto Familiar de la Raza	Mission, Latina, youth component	VBGO
Iris	Low income	VBIO, IRR, MSW, SSG, VBGO
Larkin Street	Homeless, youth	IRR, MSW, VBIO
Proyecto Contra SIDA por Vida	Mission, Latina	IRR, MSW, SSG
San Francisco AIDS Foundation		Hotline
SF City College	Community college students	CTR/PCRS
SFDPH-City Clinic	STDs	CTR/PCRS
SFDPH-YUTHE at City Clinic	African American youth/STDs	MSW, SSG, VBIO
San Francisco General Hospital	Low income	CTR/PCRS
SFDPH-WEDGE	In school youth (under 18)	MSW
SFDPH-Special Programs for Youth	Incarcerated youth	CTR/PCRS, SSG, IRR
Tenderloin AIDS Resource Center	Tenderloin, low income	IRR, MSW, SSG, VBGO
UCSF/ AIDS Health Project		CTR/PCRS

\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

**EXHIBIT 16. TOTAL ESTIMATED FUNDING LEVELS FOR FSM, FSM/F, AND FSF \***

<b>BRP</b>	<b>Funding Amount</b>
Females (FSM, FSF/M, FSF)	\$82,594
All Females including IDUs	\$377,230
F, MSF	\$119,506
Multiple BRPs (includes Females)	\$3,272,191
<b>TOTAL</b>	<b>\$3,851,521</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets FSM, FSM/F and FSF specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$3,851,521 targets FSM, FSM/F and FSF

ommendations for strengthening HIV prevention efforts for this group are offered

- Increase HIV prevention programs for HIV-positive individuals, including those that focus on increasing awareness about their role in reducing new HIV infections and that provide skills training for discussing serostatus and negotiating condom use.
- Increase interventions that address sexual abuse history in the context of HIV prevention.
- Focus prevention efforts on the highest risk

females (e.g., those with multiple or high-risk female partners, those with high STD rates).

- Continue to target prevention efforts at the high-risk male partners of FSM and FSM/F (e.g., MSM/F, MSM/F-IDU, and MST/F).
- To the extent possible, collect data on the risk behaviors of the male partners of women who seroconvert.
- Improve the availability and accessibility of substance abuse treatment, mental health services, and STD detection and treatment services.

## Section IX: MSF

### NEEDS ASSESSMENT

#### OVERALL NEEDS OF MSF

According to the HIV Consensus Meeting Report (SFDPH, 2001), there are approximately 264,643 MSF in San Francisco, but only 2,000 of these men are considered to be at risk for HIV. It is estimated that 2 new HIV infections will occur among this group in 2001, representing 0.2% of all new infections. As with non-IDU females, incidence in this population remains very low at less than 0.1% per year. Although the probability of female-to-male HIV transmission is low, the primary risk factors for MSF who do not inject drugs are unprotected sex with multiple female partners, high-risk female partners, or female partners outside of the primary

relationship (Epidemiologic Profile, Summary of Behavioral Studies, pp. 88-89). In addition, non-injection drug use among men may lead to sexual risk-taking (Epidemiologic Profile, Summary of Behavioral Studies, pp. 88-89). Finally, recent evidence suggests that heterosexual men and women may believe that HAART reduces HIV transmissibility, possibly affecting risk behaviors (van der Straten et al., 1998).

#### UNIQUE NEEDS OF MSF SUBPOPULATIONS

No MSF subpopulations were found to have a prevalence greater than 8% in any recent study that met the criteria for inclusion in the priority setting model, and thus no subpopulations were prioritized to be ensured funding. However, certain subgroups may be more vulnerable as evi-

denced by prevalence rates higher than those for MSF overall, such as homeless MSF adults (Zolopa et al., 1994) and MSF in alcohol treatment (Avins et al., 1994, Woods et al., 2000). It should also be noted that African American men (and women) have the highest rates of chlamydia, gonorrhea, and syphilis, about three times the average rates for the City as a whole. African American male (and female) youth under 20 are even more disproportionately affected, with chlamydia and gonorrhea rates over 3.5 times the average rate for the City as a whole, and six to eight times the rates for the ethnic group with the next highest rates.

## RESOURCE INVENTORY

Very few agencies have programs that specifically target MSF. Programs that target these

men include individually focused and small-group interventions, community-wide campaigns, and counseling and testing services (Exhibits 17 and 18).

## GAP ANALYSIS: IMPROVING HIV PREVENTION FOR MSF

Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

- Increase HIV prevention programs for HIV-positive individuals, including those that focus on increasing awareness about their role in reducing new HIV infections and that provide skills training for discussing serosta-

### EXHIBIT 17: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING MSF

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type*</i>
Black Coalition on AIDS-3 Street		MSW, SSG, VBIO
SFDPH-Bureau Family Health	Low income	CTR/PCRS
SFDPH Forensic AIDS Project	Incarcerated adults	CTR/PCRS, SSG
Haight Ashbury Free Clinic	Low income	CTR/PCRS, IRR, PCM, VBIO
ICHO		VBIO
Instituto Familiar de la Raza	Mission, Latino, youth component	IRR, MSW, VBGO, VBIO
San Francisco AIDS Foundation		Hotline
SF City College	Community college students	CTR/PCRS
SFDPH-City Clinic	STDs	CTR/PCRS
SFDPH-YUTHE at City Clinic	African American youth/STDs	MSW, SSG, VBIO
San Francisco General Hospital	Low income	CTR/PCRS
SFDPH-WEDGE	In school youth (under 18)	MSW
SFDPH-Special Programs for Youth	Incarcerated youth	CTR/PCRS, SSG, IRR
UCSF/ AIDS Health Project		CTR/PCRS

\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

### EXHIBIT 18. TOTAL ESTIMATED FUNDING LEVELS FOR MSF\*

<i>BRP</i>	<i>Funding Amount</i>
MSF only	\$101,612
MSF and Females	\$119,506
MSF MSF-IDU	\$97,444
Multiple BRPs (includes MSF)	\$2,882,711
<b>TOTAL</b>	<b>\$3,201,273</b>

\*Because of limitations in the current data reporting structure, it is not possible to determine precisely how much money targets MSF specifically, apart from the other BRPs. Therefore, it is only possible to say that up to \$3,201,273 targets MSF.



tus and negotiating condom use.

- Focus prevention efforts only on the highest risk MSF (e.g., those with multiple or high-risk female partners, those with high STD rates).
- Improve risk assessments performed at agencies or during research by including questions about sex with both biological and

transgendered women, as some MSF and heterosexual men may have sex with transgendered women.

- Improve the availability and accessibility of substance abuse treatment, mental health services, and STD detection and treatment services.

## Section X: HIV-POSITIVE INDIVIDUALS

### NEEDS ASSESSMENT

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As people with HIV and AIDS are living healthier lives and becoming more sexually active, primary prevention for people living with HIV must become a priority. A number of considerations should inform the development of prevention interventions for HIV-positive individuals (Collins et al., 2000):

- Communicating responsibility in not infecting others without promoting shame or stigma
- Acknowledging the need for intimacy through sex
- Improving communication between partners
- Considering diverse opinions on disclosure as a prevention approach
- Understanding the diversity of the epidemic and the need for multiple interventions
- Addressing the multiple contextual factors that contribute to risk (including substance use)
- Communicating clear messages in the absence of absolute answers to important biomedical questions

In addition, policy and legal issues such as the ability to use federal dollars to support prevention interventions for people living with HIV/AIDS (Collins et al., 2000) and laws against non-disclosure of HIV status (Shriver et al., 2000), should be considered areas for structural interventions.

### RESOURCE INVENTORY

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A number of agencies and programs currently provide services to HIV-positive individuals, including individual and small group interventions, outreach, and media campaigns such as the recent television campaign "HIV Stops With Me." Many programs target mixed serostatus groups and deal with issues that are particularly salient for HIV-positive individuals, such as disclosure of serostatus. Therefore, HIV-positive individuals do receive tailored services that are not reflected in the resource inventory in Exhibit 19, which identifies only those programs targeting HIV-positive individuals exclusively.

### GAP ANALYSIS: IMPROVING PREVENTION FOR POSITIVES

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Based on a comparison of the needs assessment and the resource inventory, the following recommendations for strengthening HIV prevention efforts for this group are offered.

- Acknowledge the extensive efforts of HIV-positive individuals not to infect others (Collins et al., 2000).
- Promote social support networks among HIV-positive people to counter isolation and loneliness.
- Support health-promoting community norms.
- Increase research related to the effects of

### EXHIBIT 19: CURRENT HIV PREVENTION CONTRACTS/MOUs TARGETING HIV-POSITIVE INDIVIDUALS

<i>Agency</i>	<i>Subpopulations/Focus</i>	<i>Intervention Type*</i>
AIDS Health Project		Training
Bay Positives	HIV-positive youth under 26	Health communications, IRRC, VBGO, VBIO
Better World	HIV-positive component	Media
STOP AIDS Project	HIV-positive component	Community-level intervention, IRRC, SSG, VBGO, VBIO

\*A key to the intervention type abbreviations can be found in the Guide to the Plan, pp. vi-viii.

HAART on HIV transmission, the role of viral load in blood compared with sexual fluids in HIV transmission, the risks of re-infection, the risks of oral sex, and other areas in which the answers remain unclear (Collins et al., 2000).

- Provide prevention within the socioeconomic context of these individuals' lives, including economic emergencies, racism, homophobia, child care, violence, and drug and alcohol use and address the effects of social policy and norms on individual behavior (Collins et al., 2000).
- Consider multiple factors when developing HIV prevention messages for HIV-positive individuals, including the meaning of sexual intimacy, personal protection and altruism, responsibility, issues related to disclosure and communication, and diversity of the HIV-positive population (Collins et al., 2000).
- Increase PCRS activities.
- Increase the capacity of prevention- and CARE-funded agencies to provide HIV prevention to HIV-positive individuals.
- Improve the availability and accessibility of substance abuse treatment and mental health services.
- Reduce STD rates through improved outreach, availability, and accessibility of STD detection and treatment services.

## Section XI: OTHER HIV PREVENTION NEEDS IN SAN FRANCISCO

There are a number of research, technical assistance, and HIV prevention service system needs that, when addressed, strengthen the foundation for improving prevention in the ways discussed in this chapter. A summary of these needs and the mechanisms in place to meet them is given here; for a more detailed discussion, refer to the other chapters in the Plan.

### RESEARCH AND DATA COLLECTION NEEDS

Some of San Francisco's research and data collection needs are described below. Through

close communication and collaboration with researchers at SFDPH and the Center for AIDS Prevention Studies (CAPS), the HPPC and the HIV Prevention Section make continual efforts to ensure that the research agenda in San Francisco reflects current trends in the epidemic and that the results are translated into improved prevention. Refer to the Surveillance and Research chapter (pp. 195-202) for more detailed information. Needs include:

- Race/ethnicity HIV incidence data
- Prevalence and incidence data for transgendered populations
- Epidemiologic and risk behavior data among women and non-gay male populations

- Epidemiologic and risk behavior data among non-gay-identifying MSM
- Data on the relationship between high STD rates and HIV risk
- Effects of medical advances for AIDS on perception of risk and risk behaviors
- Effects of AIDS dissident messages on perception of risk and risk behaviors
- Sexual risk behavior of MSM-IDU
- Risk behavior of drug-using MSM
- Intervention and evaluation research related to the effectiveness of the following HIV prevention interventions and approaches: Internet, post-exposure prophylaxis/prevention (PEP), prevention for positives, and serostatus approach.
- Understanding the recent increase in new infections among MSM, MSM/F, MSM-IDU, and MSM/F-IDU

## TECHNICAL ASSISTANCE NEEDS

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HIV prevention providers, the HPPC, and the HIV Prevention Section of SFDPH all have areas in which technical assistance would be useful in improving prevention efforts. A summary of these needs is given below. These needs are met on an ongoing basis through an Organizational Development/ Technical Assistance Program (OD/TA) for HIV prevention providers, consultant teams that provide advice and guidance, and ongoing training and assistance sought by the HIV Prevention Section. Refer to the Technical Assistance chapter (pp. 211-216) for more detailed information.

- Providers need assistance around evaluation (e.g., data collection and database management) as well as organizational development (e.g., writing policies and procedures).

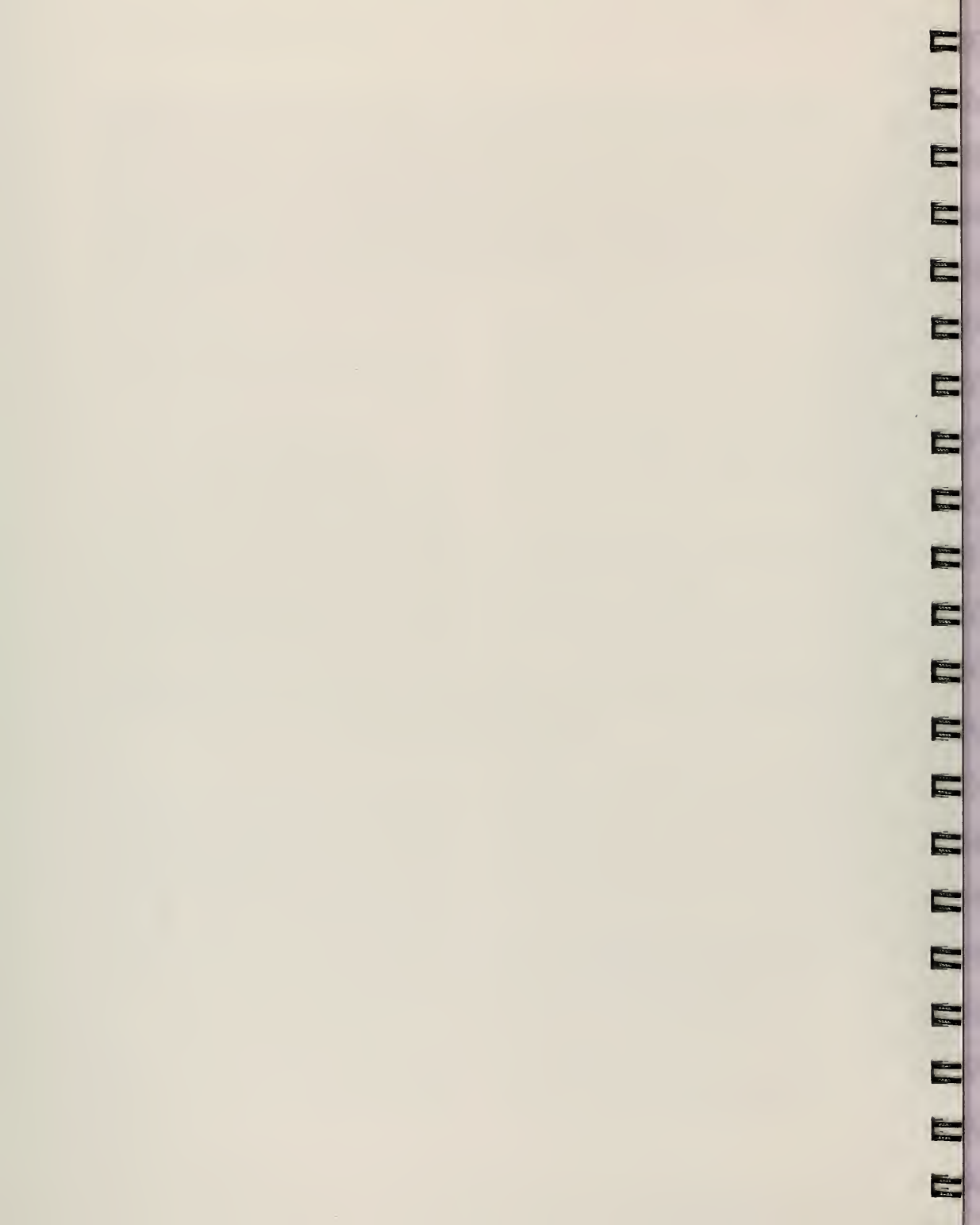
- The HPPC needs assistance around member orientation and education, interpretation and use of behavioral and epidemiologic data, and leadership development and mentoring, among other areas.
- The HIV Prevention Section of SFDPH needs assistance around helping community-based organizations doing HIV prevention to design appropriate outcome objectives, improving coordination and collaboration with other SFDPH units, and implementing innovative and new initiatives (e.g., prevention for positives, care and prevention cross-program activities).

## LINKAGES AND COORDINATION

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There is a need in San Francisco for improved linkages and coordination among agencies and programs (e.g., referrals, trainings, provision of services). Some of the general needs are given here. The HIV Prevention Section and the HPPC are committed to identifying mechanisms for encouraging and supporting collaboration and coordination that results in better HIV prevention. Refer to the Linkages and Coordination chapter (pp. 203-210) for more detailed information. Needs include:

- Increased support for successful referrals and linkages
- Expansion of providers' knowledge of services and referral resources and strengthening of relationships among referring agencies
- Implementation and maintenance of referral tracking mechanisms
- Expansion and strengthening of linkages within the HIV prevention provider community and between HIV prevention providers and other related services

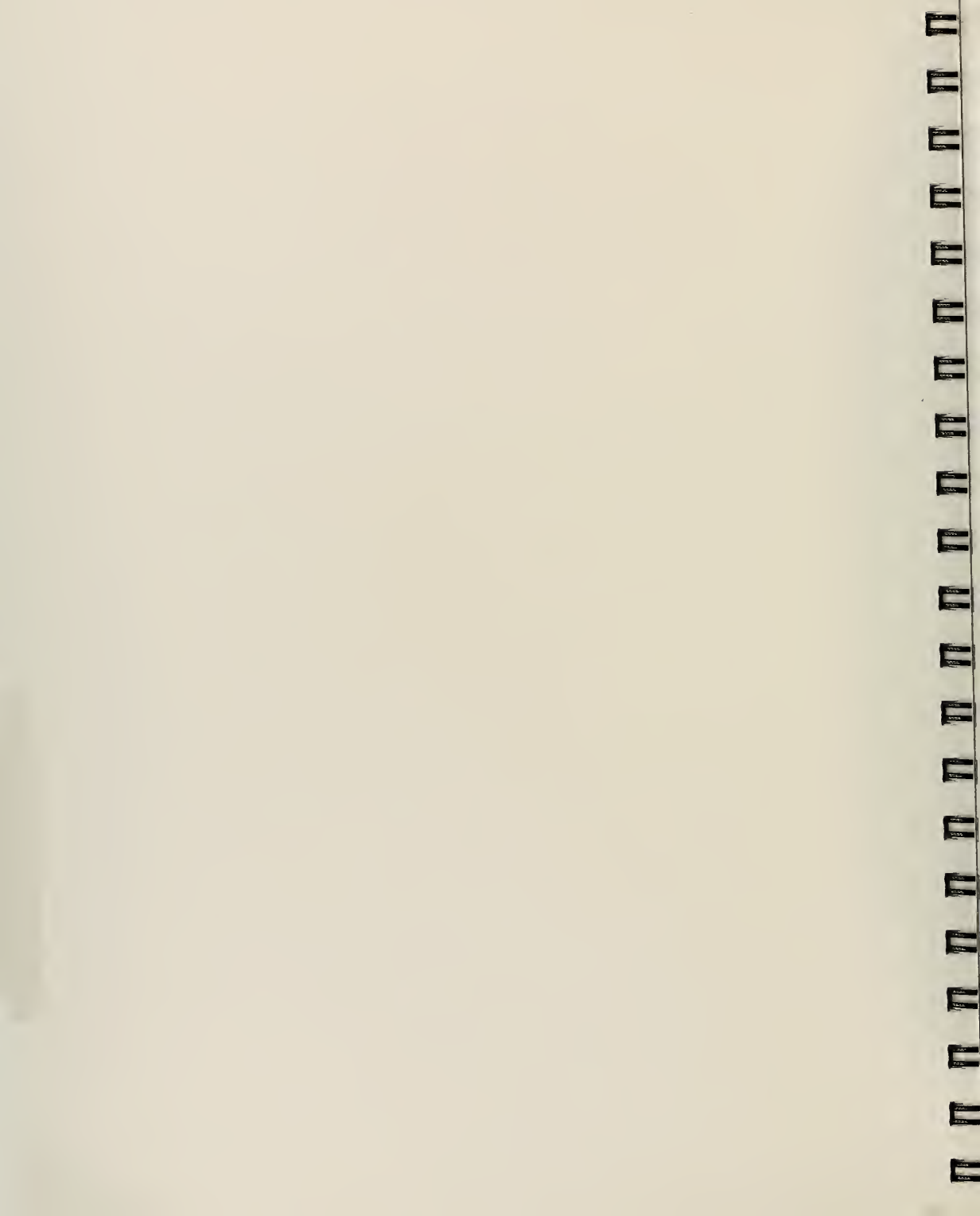


## Chapter 3

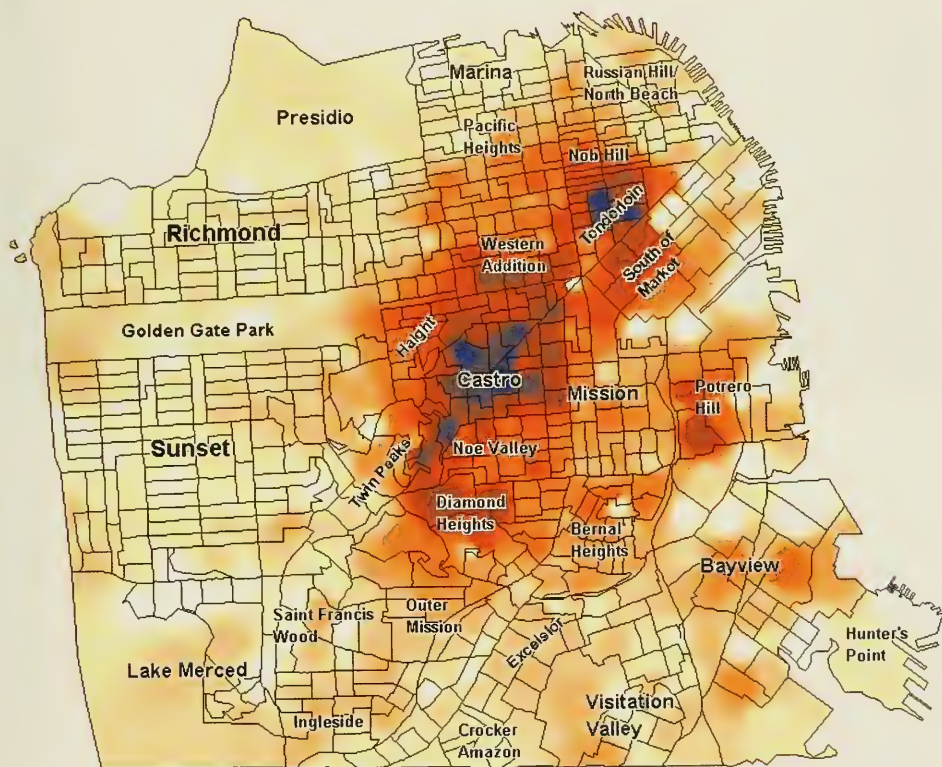
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# EPIDEMIOLOGIC PROFILE: HIV AND AIDS IN SAN FRANCISCO





## CUMULATIVE AIDS CASES 1981-2000





## CHAPTER OVERVIEW

**Section I: Introduction** presents an overview of the types of data used in this chapter.

**Section II: San Francisco and Its People** provides detailed demographic data for San Francisco's population.

**Section III: AIDS and HIV in San Francisco: Overview of the City's Epidemic** presents key data and descriptive information regarding San Francisco's epidemic in summary format.

**Section IV: Profile of HIV/AIDS in San Francisco by Demographic Variables and Behavioral Risk Population** presents HIV incidence and prevalence estimates and AIDS case data, organized by BRP and demographic variables such as age, race/ethnicity, and gender.

**Section V: Summary of Behavioral Risk Studies** summarizes recent studies on the behavioral risks of each BRP.

**Section VI: Co-factors** identifies factors that can increase risk for HIV, increase susceptibility to infection, or decrease ability to receive and act upon HIV prevention messages, and discusses who is affected by these various factors in San Francisco.

**Appendix 1** provides a detailed description of the strengths and limitations of the data used in this chapter.

**Appendix 2** provides data on cumulative AIDS cases in San Francisco.

**Appendix 3** is a bibliography of behavioral risk studies published since 1997 that were conducted with San Francisco populations.

## Section I: INTRODUCTION

### TYPES OF INFORMATION USED IN THE EPIDEMIOLOGIC PROFILE

The Epidemiologic Profile draws on multiple sources of information: U.S. Census data, population estimates, the AIDS case registry, prevalence studies, behavioral studies, and surrogate markers. Much of the HIV- and AIDS-related data sources used for the epidemiologic profile are not available in any other area of the U.S. The diversity and richness of the data in San Francisco provide a more comprehensive picture of the epidemic than is available in other jurisdictions.

Both HIV and AIDS data are presented in this chapter, but there are distinct differences in

how these two types of data should be interpreted. AIDS data tells the story of HIV transmission 10 to 15 years ago, whereas HIV data describes current patterns of transmission. AIDS data have implications for care and treatment and also show a partial picture of where the burden of disease is, although they do not include HIV-positive individuals who do not have an AIDS diagnosis. In contrast, HIV data have the potential to show a more accurate picture of the recent burden of disease in particular populations. HIV data are more valid indicators than AIDS data of current trends in the epidemic, but because AIDS is a reportable condition in California and HIV is not, AIDS data are more complete; therefore, both types of data are needed to get the most comprehensive picture of the epidemic.

All of the data sources used are listed below and

briefly described. (See Appendix 1 for further discussion of the strengths and limitations of each of these data sources.)

## INFORMATION ABOUT AIDS

**AIDS case registry.** An AIDS case registry is kept by each public health jurisdiction and contains basic demographic and transmission category information about those diagnosed with AIDS.

## INFORMATION ABOUT HIV

**HIV prevalence studies.** These studies are conducted to determine the percentage of persons within a population who are infected with HIV at a specific point in time.

**HIV incidence studies.** The incidence is the rate of new infections occurring in a defined population over a specified time period. The time period is usually one year and the defined population is considered a group at risk for becoming infected during the course of the year. Because acquisition of HIV infection is usually measured by the new detection of antibody to HIV, HIV incidence is also referred to as the "rate of HIV seroconversion." HIV incidence is the single most important measure of where the epidemic is currently spreading and where prevention efforts are most needed. Unfortunately, the measurement of HIV incidence has been complex, costly, and prone to potential biases. Several methods to measure HIV incidence in populations at risk are available: (1) longitudinal cohort studies, (2) record-based studies, and (3) serological testing algorithm for recent HIV seroconversion (STARHS or the detuned ELISA). (See Appendix 1 for detailed descriptions of each of these research methods.)

**Sentinel surveillance.** Certain populations, such as persons entering methadone clinics, health clinics (prenatal, tuberculosis, and STD), jails or prisons, job corps programs, or the mili-

tary, have been chosen for sentinel surveillance. These studies ascertain the percentage of HIV-positive persons in each group at a specific point in time and are usually repeated at the sites over the course of several years. Thus, these studies ascertain both HIV incidence and prevalence within these populations.

**Counseling and testing data.** HIV is not a reportable disease in California, but publicly funded testing sites collect and report basic demographic information and test results from persons using the services.

**2001 HIV Consensus Meeting Report (SFDPH, 2001).** In January and February of 2001, the SFDPH convened a panel of researchers, epidemiologists, and HIV/AIDS experts to bring together as many estimates of HIV infection as possible. The panel presented and discussed findings from all the HIV data sources just described, as well as others (see the 2001 HIV Consensus Report at <http://www.dph.sf.ca.us/> for a description of all the data sources used). They used the range of findings in these studies to estimate HIV prevalence and incidence in different populations.

## INFORMATION ABOUT RISK FOR HIV INFECTION

**Behavioral studies.** These studies do not test for HIV infection, but rather ascertain the nature and extent of risk behaviors in specific populations.

## INDIRECT INDICATORS OF RISK

**Surrogate markers.** Surrogate markers are diseases or conditions known to public health officials to follow the pattern of the HIV epidemic. These markers, such as STDs, teen pregnancy, and tuberculosis, can provide information about trends in the HIV epidemic if they are directly associated with HIV infection (e.g.,



STDs, tuberculosis) or if they indicate the presence of behaviors that can cause HIV transmission (e.g., teen pregnancy). These markers were used prior to the development of the HIV antibody test, and they can also be used when a prevalence study is too expensive or impractical. Some surrogate markers are very good for predicting HIV infection (e.g., STDs), but others are less reliable (e.g., tuberculosis, teen pregnancy).

**Co-factors.** As the Council defines them, co-factors are biological, behavioral, psychological, social, or situational factors that can increase an individual's risk for contracting HIV or decrease an individual's ability to act upon prevention messages. Some co-factors, such as STDs, are also surrogate markers.

## SIZE AND CHARACTERISTICS OF THE POPULATION

**Census information.** The U.S. government conducts a census, or counting, of the U.S. population every ten years. The demographic information is made available in a variety of formats. As data from the 2000 Census have only recently been released, much of the Census data presented here are from the Claritas Demographic Update, which contain estimates based on the 1990 Census. The Claritas Demographic Update provides current population projections at the state, county, and sub-county levels. Claritas' methodology includes the analysis of Census and other federal data, as well as demographic data from local governments, postal delivery counts, and consumer databases.

**Population size estimates.** Estimates of the size of the various BRPs are based on the 2001 HIV Consensus Meeting Report (SFPDPH, 2001).

# Section II: SAN FRANCISCO AND ITS PEOPLE

## INTRODUCTION

San Francisco, California is the fifth largest metropolitan region in the United States. It has the highest rate of AIDS cases in relation to population size of any U.S. incorporated city. The city is well known for its diverse and multi-cultural population, dramatic geography (there are 43 hills and 30 miles of shoreline), and progressive thinking. With a total area of 46.4 square miles, the City sits at the northern tip of a peninsula that divides the Pacific Ocean and the San Francisco Bay. San Francisco County is one of seven neighboring counties that comprise the San Francisco Bay Area. The City is one of the most densely populated areas in California, with over 16,500 persons per square mile. San Francisco is also one of the cities most frequently visited by domestic and international tourists (over 4 million visited the city in 1999); other major industries include services,

retail, finance and insurance, and wholesale trade. Over the past five years, San Francisco and the Bay Area have become ground zero for the fast growing high tech industry, adding to the richness and diversity of the city's people and its character. A map of San Francisco and its neighborhoods is presented in Exhibit 1.

## OVERVIEW OF SAN FRANCISCO

### POPULATION GROWTH

- San Francisco has an estimated population of 768,312, a 6% increase from 1990. This is slower than the rate for the entire Bay Area (8%) and California (9%). (The total population number could be an underestimate. The California Department of Finance estimates the San Francisco population to be 793,300 persons in 1999. The population number will

be updated when Census 2000 data become available. Department of Finance estimates tend to be larger than those provided by Claritas.)

- The China Basin, Potrero Hill, South of Market areas (San Francisco Planning District 9), and the Bayview, Hunter's Point areas (San Francisco Planning District 10) are expected to have the highest level of growth over the next five years (7% and 6%, respectively).

## GENDER DISTRIBUTION

- It is estimated that currently 49.6% of San Francisco's population is male and 50.4% of the population is female.
- There are an estimated 4,000 individuals living in San Francisco who self-identify as transgendered. Of these, 75% are male-to-female (MTF) transgendered, transsexual, or female (born male), while 25% identify as female-to-male (FTM) transgendered, transsexual, or male (born female). (Bakker et al., 1993, Clements et al., 1998, Eklund et al., 1988)

## RACIAL AND ETHNIC COMPOSITION

- San Francisco continues to be a "minority majority" city. In 1999, San Francisco's population was estimated to be approximately 38% White, 35% Asian/Pacific Islander, 17% Latino/Hispanic, 10% African American, and 0.3% Native American. In 1990, San Francisco's population was estimated to be 47% White, 29% Asian/Pacific Islander, 13% Latino/Hispanic, 11% African American, and 0.4% Native American.
- San Francisco Planning District 3 (Chinatown, Nob Hill, Russian Hill, and North Beach), San Francisco Planning Districts 1, 14, and 15 (Richmond, Sunset, and Presidio), and San Francisco Planning District 12 (Outer Mission, Visitacion Valley, Excelsior) had the largest proportion of

Asian/Pacific Islanders in 1999. These proportions were 63%, 50%, and 48% respectively.

- Within San Francisco, the Mission and Bernal Heights areas (San Francisco Planning Districts 8 and 11) have over three times the proportion of Latinos/Hispanics (56%, n=42,182) than the City as a whole.
- While African Americans compose 10% of San Francisco's total population, African Americans compose 55% (n=16,963) of the Bayview/Hunter's Point area (San Francisco Planning District 10).

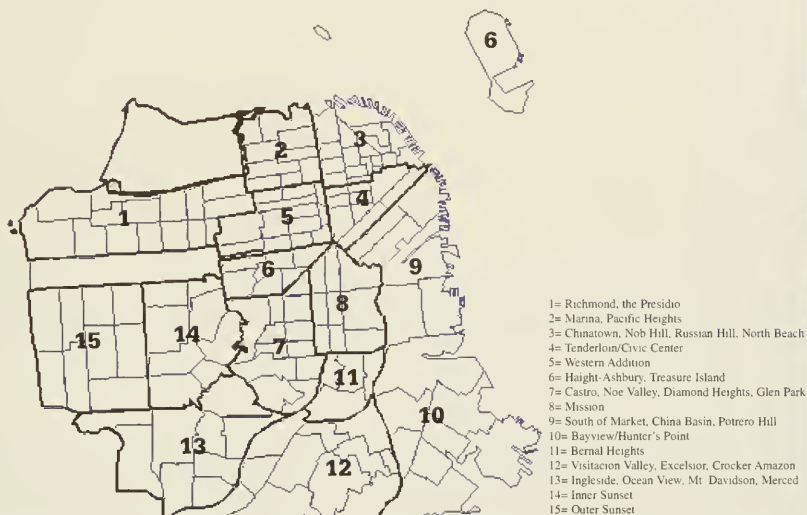
## INCOME AND POVERTY

- In 1999, 20% of San Francisco households (n=65,421) had incomes of less than \$20,000 a year. The same proportion of households (n=64,139) had incomes of \$100,000 or more.
- The Tenderloin, Civic Center area (San Francisco Planning District 4) and the Chinatown, Nob Hill, North Beach, Russian Hill area (San Francisco Planning District 3) had the highest proportion (32% and 31%, respectively) of households earning less than \$17,500 in 1999.
- In 1990, 13% of the City's population was living below the federal poverty level.

## IMMIGRATION

- According to the 1990 Census, 34% of San Francisco residents were foreign-born. However, a post-1990 study conducted by the U.S. Census Bureau strongly suggests that this figure underrepresents immigrant populations residing in San Francisco. The study found that immigrant populations living in San Francisco's Mission District (San Francisco Planning District 8) were undercounted by 19%, due to the large presence of undocumented individuals.
- The Public Policy Institute of California estimates that in 1996, San Francisco's undocu-

## EXHIBIT 1. SAN FRANCISCO'S 15 PLANNING DISTRICTS AND NEIGHBORHOOD COMPOSITION



mented immigrant population ranged from 22,000 to 76,000 persons.

1990 and 1999. Estimated population growth between 1999 and 2004 is expected to slow by 1.7% (to 4.3%) (Exhibit 3).

## CITY-WIDE POPULATION ESTIMATIONS AND PROJECTIONS

San Francisco population estimates were derived using data from the 1990 Census, the Department of Finance, and the Claritas Demographic Update (described in Section I: Introduction). Specific data sources are indicated beneath each Exhibit.

### POPULATION GROWTH

The population of San Francisco has experienced an estimated growth of 6.0% between

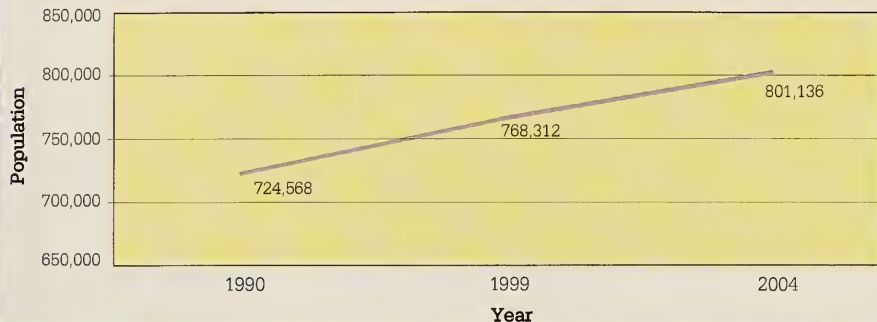
### GENDER DISTRIBUTION

The San Francisco population is approximately evenly divided among males and females (Exhibit 2).

## EXHIBIT 2. SAN FRANCISCO POPULATION, BY GENDER, 2000 ESTIMATES

Gender	Percent City Population
Male	49.6%
Female	50.4%

Source: California Department of Finance. Race/Ethnic Population with Age and Sex Detail, 1970-2040.

**EXHIBIT 3. POPULATION SIZE AND GROWTH, SAN FRANCISCO, 1990-2004**

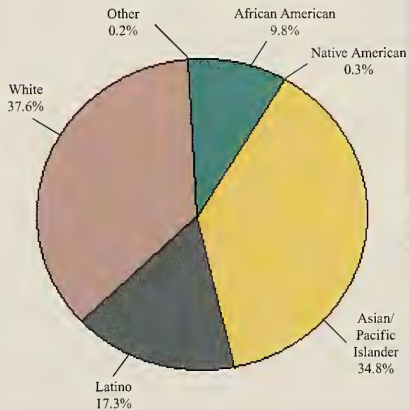
Sources: 1990 Census; 1999 and 2004 Claritas Healthcare Solution Zip Code Data.

**Transgendered Estimates**

There are an estimated 3,000 individuals living in San Francisco who self-identify as MTF transgendered, transsexual, or female (born male). Data from the Netherlands suggest that FTM transsexualism is about one third as common as MTF transsexualism. Assuming that this is also true in San Francisco, there are approximately 1,000 individuals who identify as FTM transgendered, transsexual, and male (born female) living in San Francisco. (Bakker et al., 1993; Clements et al., 1998; Eklund et al., 1988; Barry Zevin, personal communication)

**RACIAL AND ETHNIC COMPOSITION**

The data presented in Exhibit 4 indicate the population sizes of racial/ethnic groups for the entire City of San Francisco. The data do not provide any indication of the distribution and concentration of certain groups within the City. Readers are referred to San Francisco Neighborhoods: Population Estimates and Projections on pp. 51-56 for this information.

**EXHIBIT 4. DISTRIBUTION OF RACIAL/ETHNIC GROUPS IN SAN FRANCISCO, 1999**

Sources: U.S. Census, Claritas Healthcare Solution Zip Code Data.



## IMMIGRATION

According to the 1990 U.S. Census, 34% (n=246,034) of San Francisco residents were foreign born,<sup>1</sup> the highest rate in the State of California. Between 1990 and 1995, the California Department of Finance estimates that 1,323 persons legally immigrated to San Francisco, maintaining San Francisco's proud image as an "immigrant city." However, it is important to keep in mind that these figures may not be fully representative of the population of immigrants residing in the City, especially in consideration of the high numbers of both documented and undocumented immigrants that were not counted by the U.S. Census. A post-1990 study conducted by the U.S. Census Bureau's Undercount Behavioral Research Group revealed that the immigrant population residing in San Francisco's Mission District was undercounted by 19% due to the large presence of undocumented persons.

Currently, no reliable estimates of the size of the undocumented immigrant population in the City of San Francisco appear to exist. According to the California Public Policy Institute, the Immigration and Naturalization Service (INS) has developed estimates for individual U.S. states, however, these estimates are subject to considerable uncertainty. The most recent INS estimate of undocumented immigrants in California is calculated at 2.0 million in 1996.

In 1990, the City and County of San Francisco was home to 3.8% of all foreign born residents residing in the State of California. However, only 1.1% of the undocumented immigrants who applied for amnesty in California under the Immigration Reform and Control Act in the late 1980s were residents of San Francisco. If we assume that San Francisco's share of undocumented immigrants in the state is the same as its share of foreign-born residents, San Francisco would be home to 76,000 undocu-

mented immigrants in 1996. However, if we assume the city's share of undocumented immigrants in the state is the same as its share of amnesty applicants, the city is home to only 22,000 unauthorized immigrants according to the California Public Policy Institute. Although these estimates apparently span a wide range, they are the only ones available.

## INCOME AND POVERTY

Income levels in San Francisco are presented in Exhibits 5 and 6. The weighted average poverty threshold for 1999 for a family of four is \$17,028, according to the U.S. Department of Commerce. The income category "less than \$17,500" in Exhibit 6 may be somewhat indicative of the number of persons living in poverty. However, it must be noted that \$17,500 is not the standard threshold used by the U.S. Census Bureau for defining who is categorized as "poor" and who is classified as "non-poor." Rather, the Census Bureau calculates poverty thresholds based on monetary income, family size and age composition, and inflation (calculated using the Consumer Price Index). The resulting thresholds can range from less than \$8,000 to more than \$35,000, depending upon the aforementioned household characteristics.

Despite the fact that these characteristics are taken into consideration, geographic area of residence is not a factor in determining thresholds and thus a large number of households in great financial need are excluded from the "poor" category. This can prove particularly detrimental to families and individuals living in densely populated urban centers where the cost of living is much higher than in other regions of the country, such as New York City and San Francisco.

The "less than \$17,500" category may or may not provide us with an accurate picture of the pro-

<sup>1</sup> Foreign born is defined as: people born outside the United States not classified as "native." The native population is defined as: persons born in the State in which they resided at the time of the Census; persons born in a different State; persons born in Puerto Rico or an outlying area of the U.S.; and persons abroad with at least one American parent.

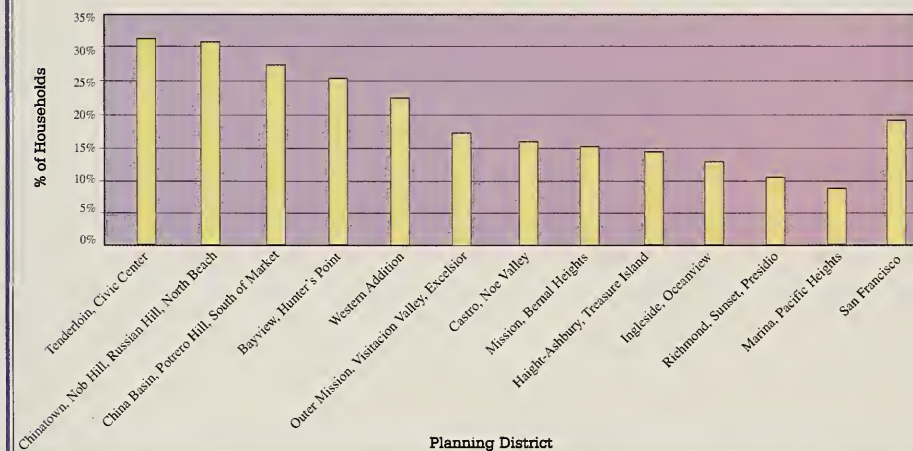


**EXHIBIT 5. HOUSEHOLD\* INCOMES, SAN FRANCISCO, 1999 ESTIMATES**

<i>Income Level</i>	<i>Number of Households</i>	<i>Percent of all Households</i>
<\$5,000	9,336	2.9%
\$5,000-9,999	16,849	5.2%
\$10,000-12,499	11,152	3.4%
\$12,500-14,999	9,668	3.0%
\$15,000-17,499	9,468	2.9%
\$17,500-19,999	8,948	2.8%
\$20,000-34,999	48,090	14.9%
\$35,000-49,999	45,815	14.2%
\$50,000-\$74,999	61,053	18.9%
\$75,000-\$99,999	38,309	11.9%
\$100,000-\$124,999	20,622	6.4%
\$125,000-\$149,999	12,138	3.8%
\$150,000+	31,379	9.7%
<b>Total</b>	<b>322,827</b>	<b>100.0%</b>

Sources: U.S. Census, Claritas Healthcare Solution Zip Code Data.

\*A household includes all the persons occupying a single housing unit (such as a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied as separate living quarters). The occupant(s) may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated (if under 10) persons who share living arrangements. Thus, Household Income is operationalized as the total money received by all household members age 15 years and older.

**EXHIBIT 6. DISTRIBUTION OF HOUSEHOLDS WITH INCOMES LESS THAN \$17,500, SAN FRANCISCO, 1999**

Sources: U.S. Census, Claritas Healthcare Solution Zip Code Data.

portion of San Francisco residents that are struggling to make ends meet. Depending on the size and age composition of households within this district, the "less than \$17,500" category compared with the U.S. Census Bureau weighted average poverty threshold for 1999 may capture a greater or lesser number of families in financial need.

The federal poverty level is used for establishing eligibility for income-based Ryan White CARE Act Title I-funded programs and services. The only exception to using this standard is for purposes relating to Title I-funded housing programs. For these services, poverty status is determined in the same manner that it is calculated by the U.S. Department of Housing and Urban Development (HUD). HUD distinguishes between "low-income" and "very low income." "Low-income" is defined as 80% of the median family income for the area. "Very low-income" is defined as 50% of the median family income for the area. Both of these income limits are subject to adjustments for areas with unusually high or low incomes or housing costs, such as in the City of San Francisco (U.S. Department of Housing and Urban Development, 2000).

## SAN FRANCISCO NEIGHBORHOODS: POPULATION ESTIMATES AND PROJECTIONS

San Francisco comprises 39 distinct residential neighborhoods, each of which exhibit unique characteristics created by the communities that live and congregate in them. Each of these 39 areas is grouped into one of the 15 city Planning Districts. The zip code is used as the unit of analysis for defining the City of San Francisco for much of the demographic data presented in this report. Thus, Exhibit 7 lists all the zip codes within the City of San Francisco according to the San Francisco Planning Districts with which they approximately correspond.

In Exhibit 7, the Presidio and Treasure Island have been incorporated into Planning Districts 1 and 6, respectively, although Treasure Island is not geographically located near Haight-Ashbury. This is due to the fact that, until recently, these districts were used solely for mil-

### EXHIBIT 7. SAN FRANCISCO PLANNING DISTRICTS BY ZIP CODE

<i>Planning District Number and Neighborhood(s)</i>	<i>Zip Code</i>
1, Richmond, Presidio	94118, 94121, 94129
2, Marina and Pacific Heights	94123
3, Chinatown, Nob Hill, Russian Hill, North Beach	94108, 94133, 94111
4, Tenderloin/Civic Center	94102, 94109
5, Western Addition	94115
6, Haight-Ashbury, Treasure Island	94117, 94130
7, Castro, Noe Valley	94114, 94131
8, Mission	94110*
9, China Basin, Potrero Hill, South of Market	94103, 94104, 94105, 94107
10, Bayview, Hunter's Point	94124
11, Bernal Heights	94110*
12, Outer Mission, Visitacion Valley, Excelsior	94134
13, Ingleside, Ocean View	94112, 94127, 94132
14, Inner Sunset	94122*
15, Outer Sunset	94122*, 94116

Source: United States Postal Service.

\*These zip codes (94110 and 94122) are contained in two different planning districts.

itary purposes and were not made available for civilian use. Thus, previously these areas had not been incorporated into any of the City's 15 Planning Districts. However, during the past year, these areas have become available to civilians and are now growing residential and commercial districts. In November 1999, the City of San Francisco Mayor's Office and Planning Department assigned these areas to already existing Planning Districts, 1 and 6, respectively.

## NEIGHBORHOOD CHARACTERIZATION

The following section describes all of the 15 Planning Districts. These short descriptions note each Planning District's neighborhoods, physical geography, ethnic composition, and aspects that distinguish it from other areas. At the end of the section, Exhibit 8 shows population growth projections by Planning District, and Exhibit 9 summarizes racial/ethnic distribution across Planning Districts.

### Planning Districts 1, 14, and 15.

The **Richmond, Sunset, and Presidio** Districts are bordered by the Pacific Ocean to the west, and flank the north and south sides of Golden Gate Park. The residential composition of these districts is 41% White, 50% Asian/Pacific Islander, 6% Latino/Hispanic, and 2% African American. Asian/Pacific Islander communities have a strong presence in these districts and influence the overall culture. In fact, 35% of San Francisco's Asian/Pacific Islander residents live in the Richmond and Sunset Districts.



**Planning District 2.** The **Marina District** and **Pacific Heights** are in the center of the northern tip of the San Francisco peninsula. These sparsely populated neighborhoods are predomi-

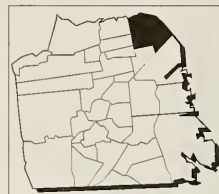
nately White (82%), with limited representation of other ethnic groups (12% Asian/Pacific Islander, 5% Latino/Hispanic, and 1% African American). Generally, the Marina



District is populated by young higher-income individuals. Pacific Heights is perched high on a hill overlooking the Marina and the Bay and is home to higher-income individuals with families.

### Planning District 3.

This district is composed of **Chinatown, Nob Hill, Russian Hill, and North Beach**. Although each of these areas is distinct, overall, the ethnic

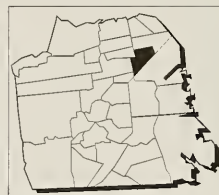


composition of these areas is 63% Asian/Pacific Islander, 30% White, 5% Latino/Hispanic, and 3% African American. Chinatown draws a significant Asian/Pacific Islander community: 11% of the City's Asian/Pacific Islander people live in this area while the nearby Nob Hill, Russian Hill, and North Beach areas are predominately White.

### Planning District 4.

The **Tenderloin, Civic Center** neighborhood

is situated just west of downtown San Francisco and the Financial District. The ethnic composition of this area roughly corresponds to the overall city demographics—41% White, 39% Asian/Pacific Islander, 11% Latino/Hispanic, and 8% African American—yet is also known to comprise a significant proportion of San Francisco's Native American population (Comprehensive Housing Affordability Strategy, 1994). The Tenderloin has a high proportion of residents living in poverty. Both male and female street-based sex industry workers work in this area, and many





homeless adults and youth congregate here. Many transgendered persons live in the area as well.

#### **Planning District 5.**

The **Western Addition**

is situated between the Richmond District to the west and the Tenderloin to the east. Second only to the Bayview, Hunter's Point area, the Western Addition is home to a high proportion of African Americans (11% of San Francisco's African American population). Of this neighborhood's residents, 24% are African American, 49% are White, 19% are Asian/Pacific Islander, and 7% are Latino/Hispanics.



#### **Planning District 6.**

The **Haight-Ashbury** and **Treasure Island**

areas are two very distinct areas of San Francisco. The Haight-Ashbury is directly east of Golden Gate Park, and became famous in the 1960s as a mecca for hippies and radical activists. Located in the San Francisco Bay between San Francisco and Oakland, Treasure Island is accessible from the Bay Bridge. Built between 1935 and 1937, Treasure Island is a manmade island and is considered a California Historic Landmark. These districts are predominately White (58%), but include 19% African Americans, 12% Asian/Pacific Islanders, and 10% Latino/Hispanics. It should be noted that there is a large pocket of homeless youth in the Haight-Ashbury neighborhood, as indicated by Census data.



**Planning District 7.** The **Castro** and **Noe Valley** neighborhoods are home to many of San Francisco's gay, lesbian, and bisexual residents. These neighborhoods are located on the north and south sides of a large hill in the most central part of San Francisco. This area's ethnic

composition is largely White (64%) compared with the City as a whole; representation of other ethnic groups includes 15% Latino/Hispanics, 15% Asian/Pacific Islanders, and 5% African Americans. The cultures of the Castro and Noe Valley reflect the pride that San Francisco's gay, lesbian, and bisexual communities feel about their identity.



#### **Planning Districts 8 and 11.** The **Mission** and **Bernal Heights**

neighborhoods are situated to the east of Noe Valley. These areas are populated and culturally influenced by people of Mexican and other Latin and Central American cultures, including both recent immigrants and those who have lived in the U.S. for generations. A significant proportion of San Francisco's Native American population also resides here (Comprehensive Housing Affordability Strategy, 1994). Overall, 56% of these districts' population is of Latino/Hispanic origin, 21% is White, 17% is Asian/Pacific Islander, and 5% is African American. Both of these neighborhoods are in flux due to gentrification.



#### **Planning District 9.**

The **South of Market**, **China Basin**, and **Potrero Hill**

areas compose the northeastern bayside of San Francisco. Their proximity to the Bay contributed to their development as San Francisco's major industrial, rather than residential, areas. As such, they are not as densely populated as many other City neighborhoods. Ethnically, these areas are 37% White, 14% African American, 24% Asian/Pacific Islander, and 24% Latino/Hispanic. The Potrero Hill neighborhood



is also known to contain a significant proportion of the Native American population in San Francisco (Comprehensive Housing Affordability Strategy, 1994). Aggregate income levels do not reflect the significant size of both high-income and impoverished residents of this neighborhood.

**Planning District 10.**  
**Bayview, Hunter's Point**

occupies the southeastern stretch of San Francisco's Bay front. This neighborhood has similar roots in industry to those of the South of Market and China Basin areas. Fifty-five percent of neighborhood residents are African American, and 23% of San Francisco's African American population lives in this area. The representation of other ethnic groups includes 25% Asian/Pacific Islanders, 15% Latino/Hispanics, and 5% Whites.



**Planning District 12.**  
**The Outer Mission, Visitacion Valley, and Excelsior,**

to the west of Bayview, Hunter's Point and surrounding McLaren Park, comprise this Planning District. These neighborhoods are home to significant proportions of people of color. Specifically, the ethnic composition is 48% Asian/Pacific Islander, 21% Latino/Hispanic, 20% African American, and 11% White.



**Planning District 13.**

Lastly, the **Ingleside** and **Ocean View**

neighborhoods cover the southwest corner of San Francisco. These neighborhoods, like those in Districts 11



and 12, are also home to proportionately more people of color compared to overall City demographics. Ethnically, these neighborhoods are 37% Asian/Pacific Islander, 27% White, 26% Latino/Hispanic, and 10% African American.

Consideration of the distribution of ethnic groups across San Francisco's neighborhoods reveals certain trends. The population of White residents is most highly concentrated in the Marina, Pacific Heights, Castro, Noe Valley, the Financial District, and China Basin. While residents of Asian/Pacific Islander origin live in moderate proportions in most neighborhoods, the highest concentrations are in Chinatown, the Richmond, and the Sunset District. Between the 1980 census and 1990 census, African American residents became more evenly distributed across San Francisco neighborhoods; nonetheless, higher concentrations remain in the Bayview, Hunter's Point, the Western Addition, and Ingleside. People of Latino/Hispanic origin live in very similar proportions in almost all San Francisco neighborhoods, with the exception of the Mission District and neighborhoods to the south and southwest of the Mission, where a strong Latino/Hispanic influence and population remains. An analysis of acculturation and language use at home might reveal other patterns, such as where recently arrived immigrants live, compared with more acculturated Latinos.



**EXHIBIT 8. POPULATION SIZE AND GROWTH, BY PLANNING DISTRICT, 1999-2004**

<i>Planning District(s)</i>	<i>Neighborhood(s)</i>	<i>1999 Estimate</i>	<i>% City Population, 1999</i>	<i>2004 Estimate</i>	<i>% Increase 1999-2004</i>
9	China Basin, Potrero Hill, South of Market	38,769	5.0%	41,510	7.1%
10	Bayview, Hunter's Point	30,852	4.0%	32,682	5.9%
12	Outer Mission, Visitacion Valley, Excelsior	34,861	4.5%	36,613	5.0%
8, 11	Mission and Bernal Heights	74,796	9.7%	78,044	4.3%
4	Tenderloin/Civic Center	79,641	10.4%	82,951	4.2%
3	Chinatown, Nob Hill, Russian Hill, North Beach	47,205	6.1%	49,135	4.1%
13	Ingleside, Ocean View	113,593	14.8%	118,196	4.1%
1, 14, 15	Richmond, Sunset, Presidio	187,482	24.4%	195,212	4.1%
2	Manna and Pacific Heights	23,340	3.0%	24,245	3.9%
5	Western Addition	34,127	4.4%	35,419	3.8%
6	Haight-Ashbury, Treasure Island	41,657	5.4%	42,808	2.8%
7	Castro, Noe Valley	61,989	8.1%	64,321	2.4%
<b>All</b>	<b>Total for San Francisco</b>	<b>768,312</b>	<b>100.0%</b>	<b>801,136</b>	<b>4.3%</b>

Sources: 1990 Census; 1999 &amp; 2004 Claritas Healthcare Solution Zip Code Data

<b>EXHIBIT 9. DISTRIBUTION OF RACIAL/ETHNIC POPULATIONS BY PLANNING DISTRICT, SAN FRANCISCO, 1999*</b>											
	<b>African Americans</b>		<b>Asian and Pacific Islanders</b>		<b>Latinos</b>		<b>Native Americans</b>		<b>Whites</b>		
<b>PD** Neighborhoods</b>	<b>Number</b>	<b>% District</b>	<b>Number</b>	<b>% District</b>	<b>Number</b>	<b>% District</b>	<b>Number</b>	<b>% District</b>	<b>Number</b>	<b>% District</b>	
1, 14, Richmond, Sunset, Presidio	4,291	2.3%	93,598	49.9%	11,596	6.2%	424	0.2%	77,209	41.2%	
2 Marina and Pacific Heights	186	0.8%	2,808	12.0%	1,237	5.3%	43	0.2%	19,052	81.6%	
3 Chinatown, Nob Hill, Russian Hill, North Beach	1,170	2.5%	29,704	63.0%	2,215	4.7%	77	0.2%	13,994	29.6%	
4 Tenderloin/ Civic Center	6,609	8.3%	31,060	39.0%	8,740	11.0%	323	0.4%	32,733	41.1%	
5 Western Addition	8,274	24.2%	6,592	19.3%	2,356	6.9%	100	0.3%	16,732	49.0%	
6 Haight-Ashbury/Treasure Island	7,863	19.0%	5,092	12.2%	4,189	10.1%	210	0.5%	24,187	58.1%	
7 Castro, Noe Valley	2,856	4.6%	9,449	15.2%	9,537	15.4%	221	0.4%	39,785	64.2%	
8, 11 Mission and Bernal Heights	3,479	4.7%	12,918	17.3%	42,182	56.4%	236	0.3%	15,732	21.0%	
9 China Basin, Potrero Hill, South of Market	5,503	14.2%	9,286	24.0%	9,254	23.9%	220	0.6%	14,371	37.1%	
10 Bayview, Hunter's Point	16,963	55.0%	7,798	25.3%	4,561	14.8%	66	0.2%	1,379	4.5%	
12 Outer Mission, Vistacion Valley, Excelsior	6,831	19.6%	16,747	48.0%	7,391	21.2%	64	0.2%	3,700	10.6%	
13 Ingleside, Ocean View	11,177	9.8%	42,457	37.4%	29,331	25.8%	224	0.2%	30,107	26.5%	
<b>All Total for the City of San Francisco</b>	<b>75,202</b>	<b>9.8%</b>	<b>267,509</b>	<b>34.8%</b>	<b>132,589</b>	<b>17.3%</b>	<b>2,208</b>	<b>0.3%</b>	<b>288,981</b>	<b>37.6%</b>	

Sources: U.S. Census, Claritas Healthcare Solution Zip Code Data.

\*\*This Exhibit does not include the racial/ethnic category "Other."

\*\*Planning District.

## Section III: AIDS AND HIV IN SAN FRANCISCO: OVERVIEW OF THE CITY'S EPIDEMIC

### INTRODUCTION

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The HIV/AIDS epidemic in San Francisco continues to be a substantial burden on the city and its residents. As of December 31, 2000, cumulative AIDS cases in San Francisco reached 27,332, representing the highest rate of AIDS cases per 100,000 in the nation. Compared to the rest of the state of California, San Francisco's AIDS cases make up 23% of the state's total, and 4% of diagnosed AIDS cases nationwide. Added to this are over 18,500 cumulative AIDS-related deaths since 1981, making it likely that very few San Franciscans have been spared the loss and devastation associated with the disease.

This section of the epidemiologic profile describes living and recent AIDS cases for the city as a whole. Information on cumulative AIDS cases is presented in Appendix 2.

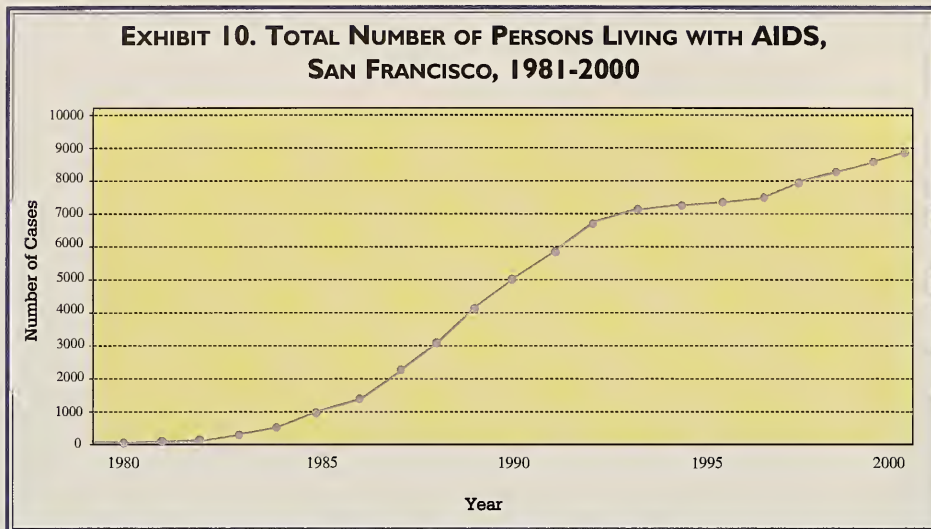
There are several limitations to the use of AIDS case data in describing the epidemic in San Francisco. First, the average time from infection with HIV to the development of an AIDS defining condition is approximately ten years. Because of this long delay, AIDS case data provide a profile of populations infected approximately ten years ago, rather than populations currently being infected. Additionally, there are likely underreporting within certain populations, such as immigrants and undocumented workers; delays in reporting; and missing data, such as no racial identification. Despite these limitations, AIDS case data represent the most complete source of information, in that all or nearly all cases are reported and therefore included in the data.

### LIVING AIDS CASES

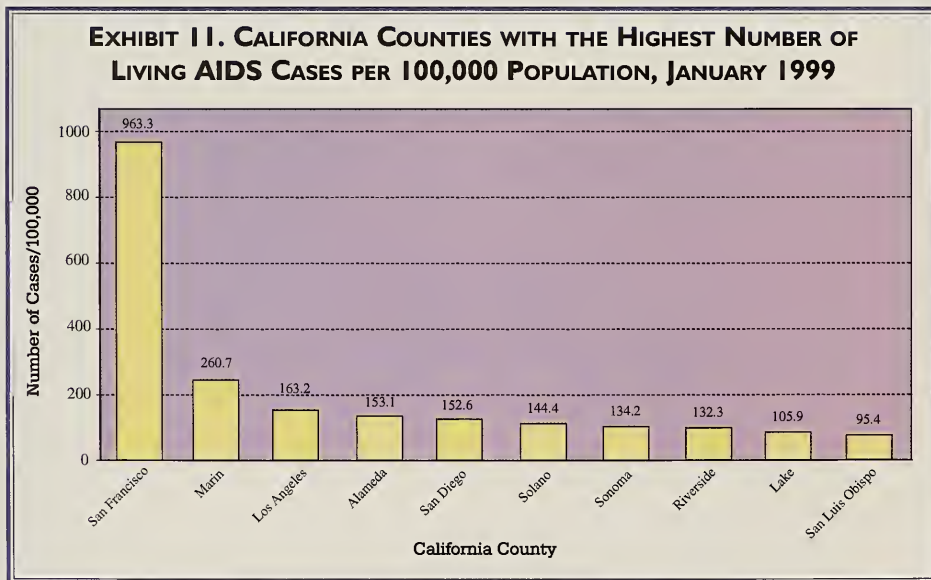
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Unless otherwise indicated, the AIDS and HIV data presented in this section account for the following three groups: (1) San Francisco residents who were diagnosed in San Francisco, (2) San Francisco residents who were in other jurisdictions at the time of their diagnosis, and (3) residents of other jurisdictions who were in San Francisco at the time of their diagnosis.

San Francisco has the fifth highest number of living AIDS cases in the United States, with 8,806 people living with AIDS as of December 31, 2000. The number of people living with AIDS has increased each year since 1997, the date of the last Epidemiologic Profile. This may be due, in large part, to the effectiveness of anti-retroviral drug therapies. With the advent of advances in HIV treatment, fewer people are progressing to AIDS, causing an increase in the total number of people living with an AIDS diagnosis. Since 1997, the number of living AIDS cases has increased by 14%, and in the last decade, the percent increase is 44%. With increases in the proportion of people living with AIDS in San Francisco in recent years, the burden of disease continues to be enormous. As of the end of 2000, AIDS prevalence in San Francisco reached 1,146 per 100,000 population, one of the highest rates in the country. Exhibit 10 presents the growth curve of living AIDS cases in San Francisco from 1981 through 2000.



Source: San Francisco Department of Public Health. AIDS Office, Seroepidemiology and Surveillance Section. Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 2000.



Source: New Hope, New Challenges: A Profile of the HIV/AIDS Epidemic in California. Northern California Grantmakers/AIDS Partnership California, September 2000.



Exhibit 11 shows the number of cases per 100,000 for the California counties with the highest number of living AIDS cases. To appreciate the demand for City services and the impact on San Francisco's many diverse communities, an overview of living AIDS case data for the entire state of California by county through January of 1999 is presented in Exhibit 12. The rate of living AIDS cases was calculated by subtracting total AIDS deaths from total AIDS cases. The total living AIDS cases are then presented as a number per 100,000 individuals, based on California Department of

Finance population estimates as of January 1999.

The data in Exhibits 11 and 12 present a stark picture of the burden of disease for the City. San Francisco's total living AIDS cases per 100,000 population are 3.7 times higher than that of Marin County, which has the second highest number per 100,000. Compared with other high prevalence areas of the state, San Francisco's living AIDS cases are 5.9 times higher than Los Angeles, 6.3 times higher than Alameda County, and 6.3 times higher than San Diego.

**EXHIBIT 12. LIVING AIDS CASES BY CALIFORNIA COUNTY  
PER 100,000 POPULATION, JANUARY 1999**

<i>County</i>	<i>Number of Cases(per 100,000)</i>	<i>County</i>	<i>Number of Cases(per 100,000)</i>
San Francisco	963.31	Fresno	50.93
Marin	260.71	Tuolumne	45.28
Los Angeles	163.23	Santa Barbara	43.70
Alameda	153.06	Ventura	41.51
San Diego	152.64	Yolo	39.90
Solano	144.36	Siskiyou	38.46
Sonoma	134.19	Butte	36.27
Riverside	132.31	San Benito	36.14
Lake	105.92	El Dorado	35.32
San Luis Obispo	95.43	Madera	35.01
San Mateo	94.93	Yuba	34.60
Sacramento	88.80	Imperial	32.35
Orange	85.35	Del Norte	32.14
Kern	83.82	Inyo	27.47
Contra Costa	81.18	Tehama	24.91
Monterey	80.39	Merced	23.32
Kings	77.74	Placer	22.61
Santa Cruz	77.65	Shasta	20.96
Lassen	73.63	Sutter	20.54
Santa Clara	73.24	Tulare	16.03
San Bernardino	71.27	Calaveras	15.58
Mendocino	63.93	Trinity	15.33
Humboldt	61.13	Glenn	11.07
Nevada	58.18	Plumas	9.83
Mariposa	55.72	Mono	9.17
San Joaquin	54.89	Alpine	--
Napa	53.54	Colusa	--
Amador	52.33	Modoc	--
Stanislaus	51.43	Sierra	--

Source: New Hope, New Challenges: A Profile of the HIV/AIDS Epidemic in California Northern California Grantmakers/AIDS Partnership California, September 2000.

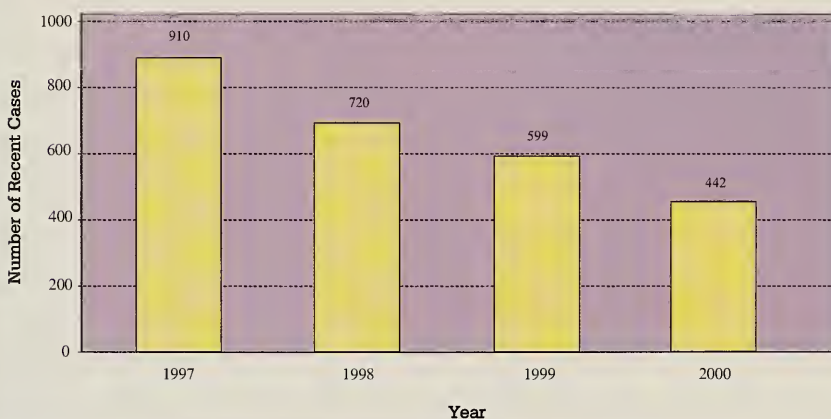


## RECENT AIDS CASES (1997-2000)

Information about AIDS cases diagnosed between January 1, 1997 and December 31, 2000 is presented here. Recent AIDS case data enable readers to gain a better understanding of the epidemic as it stands today, rather than reflecting on the decade and a half since its beginning.

Between 1997 and 2000, a total of 2,671 cases of AIDS were diagnosed in San Francisco due to sexual transmission and/or injection drug use (Exhibit 13). This represents a 63% decrease in diagnosed cases over the previous four-year period, 1993-1996. Diagnosed AIDS cases have declined every year since 1997, and 39% over the entire period. The highest rate of decline was between 1997 and 1998, at 24%. The lowest rate, 9%, occurred between 1999 and 2000.

**EXHIBIT 13. NUMBER OF NEW AIDS CASES, SAN FRANCISCO, 1997-2000**



Source: San Francisco Department of Public Health. Quarterly AIDS Surveillance Reports.

## SECTION IV:

# PROFILE OF HIV/AIDS IN SAN FRANCISCO BY DEMOGRAPHIC VARIABLES AND BEHAVIORAL RISK POPULATION

### INTRODUCTION

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In this section, data are presented in the following order:

- HIV prevalence and incidence estimates.
- Living AIDS case data by gender, race/ethnicity, age group, Planning District, and BRP. In the race/ethnicity and BRP sections, maps showing the geographic distribution of living cases are presented.
- Recent AIDS case data over the period 1997 through 2000 by gender, race/ethnicity, age group, Planning District, and BRP.

### HIV PREVALENCE AND INCIDENCE

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In 2001, the SFPD AIDS Office convened a meeting of community and academic researchers, as well as epidemiologists and behavioral scientists, to examine the findings

from prevalence, incidence, and behavioral studies conducted in San Francisco and to develop estimates of existing and new infections based on consensus. This process has come to be known as the Consensus Meeting. The San Francisco HIV Consensus Meeting occurred over two days in January and February of 2001. The goal of the meetings was to review current studies and data to determine HIV prevalence and incidence estimates for the San Francisco BRPs, with the additional goal of providing data on incidence and prevalence estimates for specific BRP subpopulations.

A summary of the results of the 2001 Consensus Meeting in San Francisco are presented in Exhibits 14 and 15, which show the final HIV incidence and prevalence estimates agreed on by the panel. For a complete description of the process, the studies used to develop the estimates, and a list of participants, refer to the 2001 HIV Consensus Meeting Report, available on-line at <http://www.dph.sf.ca.us/> or from the AIDS Office.

**EXHIBIT 14. INCIDENCE AND PREVALENCE ESTIMATES BY BRP**

<i>BRP</i>	<i>Total Population Size</i>	<i>Estimated HIV- negative: n (%)</i>	<i>Estimated HIV- positive: n (%)</i>	<i>Estimated New Infections 1/01/01- 12/31/01</i>	<i>Percent of Total Estimated Number of New Infections</i>	<i>Incidence: % per year</i>
<b>1. MSM, MSM/F</b>	46,800	34,014 (72.7%)	12,786 (27.3%)	748	69.1%	2.2%
<b>2. TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, FST/F*</b>	2,160	1,647 (76.3%)	513 (23.8%)	102	9.4%	6.2%
<b>3. MSM-IDU, MSM/F- IDU</b>	3,982	1,902 (47.8%)	2,080 (52.2%)	87	8.0%	4.6%
<b>4. FSM-IDU, FSM/F- IDU, FSF-IDU</b>	4,850	4,365 (90.0%)	485 (10.0%)	48	4.4%	1.1%
<b>5. MSF-IDU</b>	9,000	8,100 (90.0%)	900 (10.0%)	45	4.2%	0.6%
<b>6. TSM-IDU, TSM/F- IDU, TSF-IDU, TST- IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F- IDU, FST-IDU, FST/M- IDU, FST/F-IDU*</b>	840	303 (36.1%)	537 (63.9%)	40	3.7%	13.2%
<b>7. FSM, FSM/F, FSF</b>	5,334**	--	334 (0.1% of total popula- tion)	10	0.9%	<0.1%
<b>8. MSF</b>	2,082**	--	82 (<0.1% of total popula- tion)	2	0.2%	<0.1%
<b>Totals</b>	--	--	--	1,082	100.0%	--

\*Consensus estimates include only MTF transgendered persons, and not males or females who have sex with transgendered individuals.

\*\*This is the number considered to be at risk within these BRPs, not the total population size.

<b>EXHIBIT 15. PREVALENCE ESTIMATES BY BRP AND RACE/ETHNICITY</b>					
<b>BRP</b>	<b>Estimated Number Living with HIV</b>				
	<b>African American</b>	<b>Asian/ Pacific Islander</b>	<b>Latino</b>	<b>Native American</b>	<b>White</b>
1. MSM, MSM/F*	1,023 (54.6%)	448(23.9%)	1,611 (34.4%)	51	9,653 (26.1%)
2. TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, FST/F** and 6. TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F-IDU, FST-IDU, FST/M-IDU, FST/F-IDU**	510	105	235	-	178
3. MSM-IDU, MSM/F-IDU	387	35	226	22	1,410
4. FSM-IDU, FSM/F-IDU, FSF-IDU	254	19	53	9	150
5. MSF-IDU	424	19	116	10	331
7. FSM, FSM/F, FSF	122	38	64	2	108
8. MSF	28	2	22	-	30
Total Estimated Population Size, 2000, All BRPs	79,095	264,820	128,205	2,715	317,214
<b>Total Estimated Prevalence, All BRPs***</b>	<b>3.3%</b>	<b>0.2%</b>	<b>1.8%</b>	<b>3.6%</b>	<b>3.8%</b>

\*Percent prevalence was able to be estimated only for MSM, MSM/F (except Native Americans) due to lack of data on population size by race/ethnicity for the other BRPs and for Native Americans.

\*\*Consensus estimates include only MTF transgendered persons, and not males or females who have sex with transgendered individuals.

\*\*\*The estimated HIV prevalence for San Francisco as a whole is 2.3%.

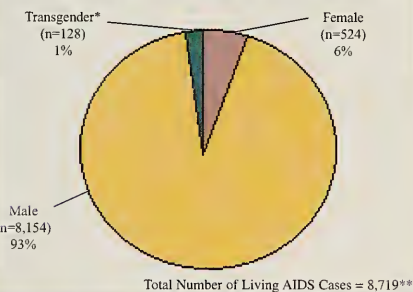
## LIVING AIDS CASES

As of December 2000, there were 8,806 people living with AIDS in San Francisco. As stated previously, the number of living AIDS cases in San Francisco has increased consistently over the past four years, suggesting improvements in HIV therapies.

### LIVING AIDS CASES BY GENDER

Exhibit 16 shows that the number of male diagnosed cases continues to far surpass the number of female and transgendered cases. The majority of male cases continues to be among Whites, with 71% of all living AIDS cases among males accounted for by White men. However, the rate of new AIDS diagnosis, discussed in a later section, shows that men of color make up a larger proportion of newly diagnosed cases. Although living AIDS cases among women have increased in San Francisco since 1997, their proportion of overall cases

**EXHIBIT 16. TOTAL NUMBER OF LIVING AIDS CASES BY GENDER, SAN FRANCISCO, DECEMBER 2000**

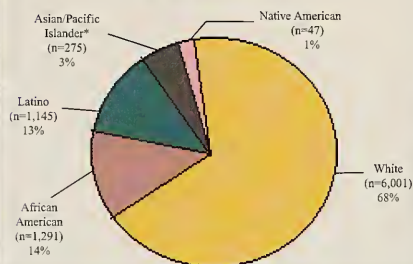


Source: SFPDPH. AIDS Office, Seroepidemiology and Surveillance Section. Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 2000.

\*This category encompasses both MTF and FTM transgendered persons.

\*\*This number does not include AIDS cases for which gender was not specified in reporting.

**EXHIBIT 17. LIVING AIDS CASES BY ETHNIC GROUP, SAN FRANCISCO, DECEMBER 2000**



Source: SFPDPH. AIDS Office, Seroepidemiology and Surveillance Section. Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 31, 2000.

\*Native American transgendered individuals are grouped with Asian/Pacific Islanders.

remains low compared to the national rate of 16%. It should also be noted that information on transgendered populations has been collected only since September 1996 and therefore is likely to be undercounted. In fact, an independent study of transgendered persons conducted in San Francisco in 1997 found an HIV seroprevalence rate of 35% (Clements et al., 2001), indicating substantial problems in reported cases in this population.

### LIVING AIDS CASES BY RACE/ETHNICITY

Exhibit 17 shows the distribution of living AIDS cases by ethnic group, and includes men, women, and transgendered persons. Of the 8,806 living AIDS cases, one third are among people of color. The past decade has seen a slight increase in the number of people of color living with AIDS and a decrease in the number of Whites living with AIDS. Although there is a decrease in living AIDS cases among Whites, this group, along with African Americans, continues to make up a disproportionate number of cases. African Americans, who make up 10% of



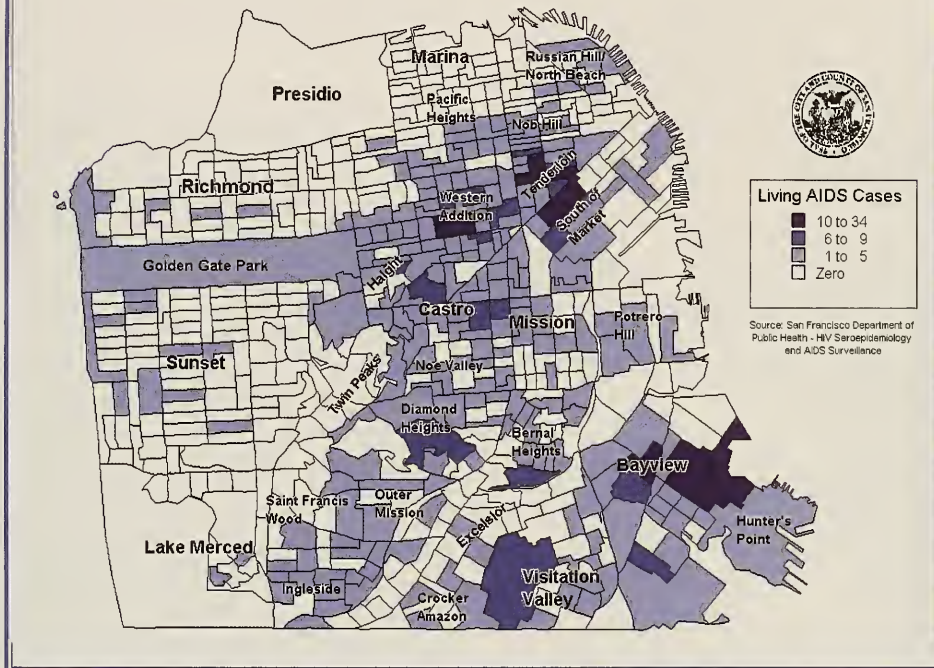
San Francisco's population, represent 14% of living AIDS cases, while Whites, who comprise 38% of the City's population, make up 68% of living AIDS cases. Women of color in general make up a higher proportion of female living AIDS cases, at 68%. It should be noted that the majority of women of color living with AIDS are African American, making up 46% of the total number of female cases. In addition, 12% of male cases are among African Americans. These data suggest a disproportionate burden of disease among African Americans, especially women.

The number of Native American living AIDS cases appears to be low due to several factors. One may be that some Native American people have Spanish surnames and are sometimes mistakenly classified as Latino, leading to an undercount of this population in general.

Additionally, some Native Americans may have received their diagnosis on a reservation and are therefore not officially counted in the City's AIDS case registry. When examining the number of Native Americans receiving care services, there appears to be more Native Americans in care than in the City's AIDS case registry.

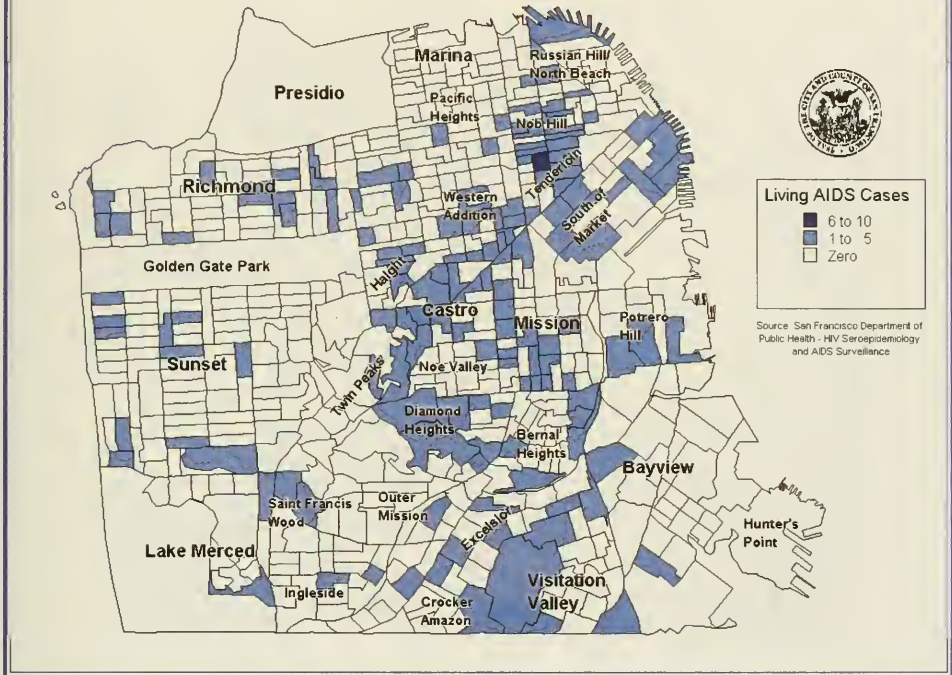
Exhibits 18 through 21 show the geographic distribution of living AIDS cases by race/ethnicity. Note that the scales on the maps are different, due to the different numbers of infections among the different groups. A shaded area on one map does not represent the same number of cases as a similarly shaded area on another; therefore, they should not be compared to each other.

# **EXHIBIT 18. MAP OF LIVING AIDS CASES AMONG AFRICAN AMERICANS, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\***



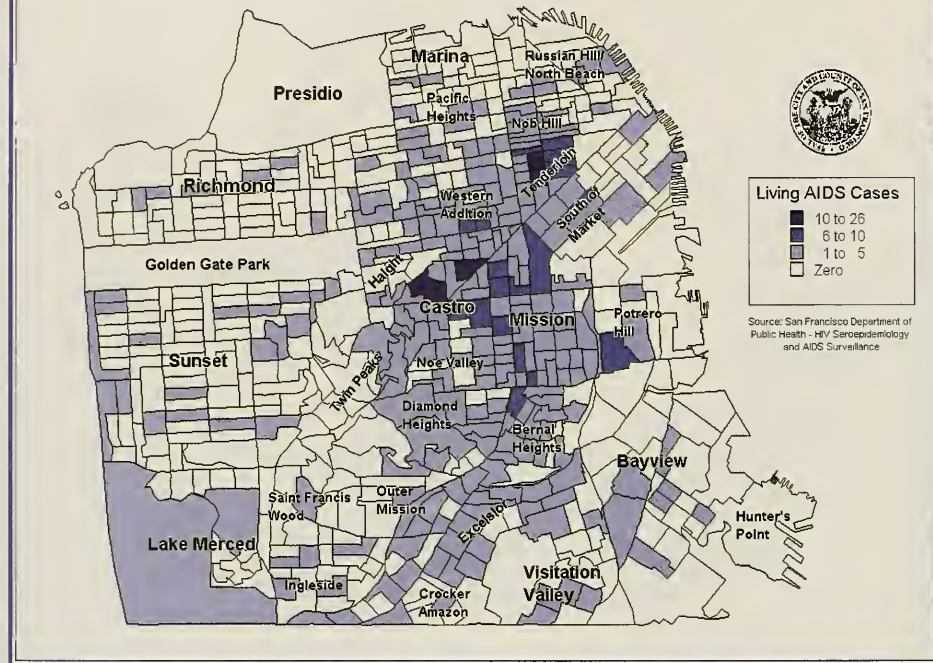
\*This map includes those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded.

# EXHIBIT 19. MAP OF LIVING AIDS CASES AMONG ASIANS/PACIFIC ISLANDERS, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*



\*This map includes those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded.

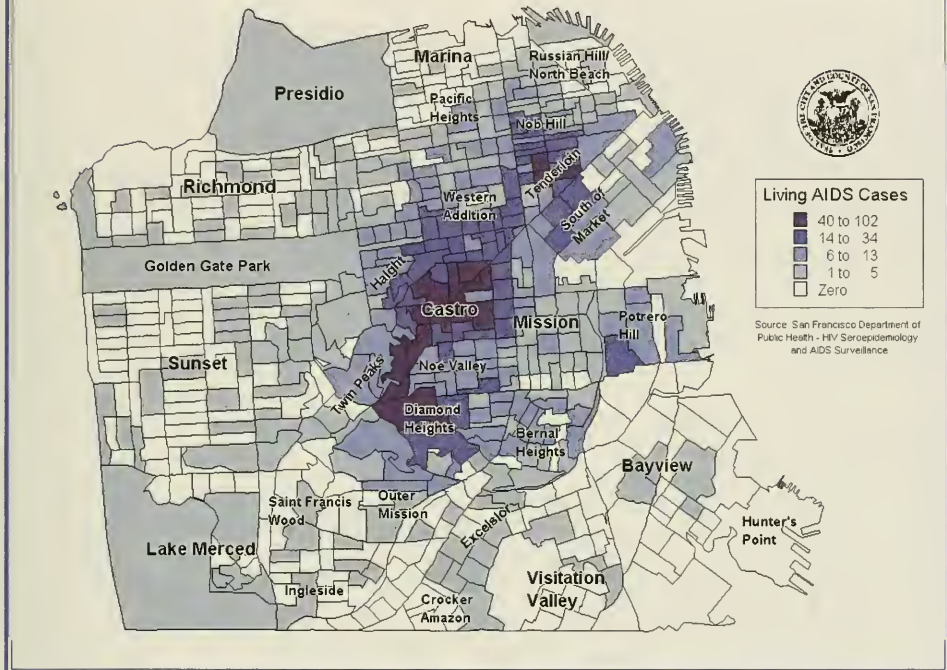
## EXHIBIT 20. MAP OF LIVING AIDS CASES AMONG LATINOS, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*



\*This map includes those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded.



## EXHIBIT 21. MAP OF LIVING AIDS CASES AMONG WHITES, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*



\*This map includes those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded



## LIVING AIDS CASES BY AGE GROUP

Exhibit 22 shows that the majority of living AIDS cases in San Francisco are among individuals over 30 years old (87%). Of these, 81% are male, 5% are female, and 1% are transgendered. Only 1% of cases under 30 years old are female.

Youth (individuals under the age of 24) appear to make up approximately 3% of total living AIDS cases. However, since 38 cases classified as transgendered between 13 to 29 are included in the youth category, it is difficult to say with certainty the exact percentage of individuals under 24 who are living with AIDS. It may be that a large proportion of the transgendered group is over 24 years old, but until more accurate data are collected on this population, the data have limitations.

Again, it is likely that a number of male cases are actually transgendered individuals. This may be due to a bias in reporting transgendered cases, the reluctance of some transgendered

persons to disclose their identity for fear of discrimination in receiving treatment, or to problems in educating providers on the importance of accurately reporting transgendered cases.

## LIVING AIDS CASES BY PLANNING DISTRICT

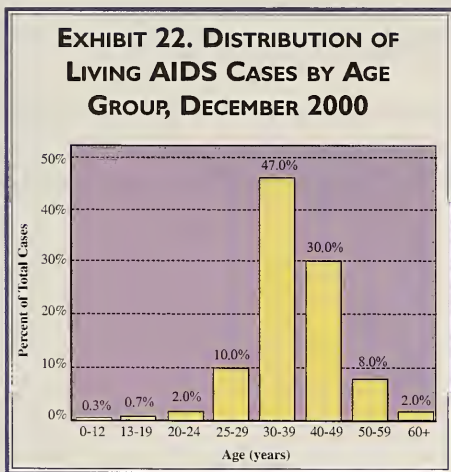
As shown in Exhibit 23, the Castro and Tenderloin districts of San Francisco account for nearly half (45%) of all living AIDS cases in the City. These neighborhoods are known for their large proportion of MSM and IDU populations, the BRPs with the highest proportion of AIDS cases and HIV prevalence and incidence rates. The South of Market, Mission, and Haight-Ashbury neighborhoods are home to nearly 30% of living AIDS cases. These areas of the city have large Latino populations as well as smaller enclaves of gay and bisexual men.

## LIVING AIDS CASES BY BEHAVIORAL RISK POPULATION

The use of CDC-defined transmission categories is mandatory for the AIDS Office AIDS Case Registry. Where possible, the transmission groups have been re-categorized into BRPs. Exhibit 24 shows where the transmission categories were folded into the BRP matrix.

Data on transgendered individuals does not currently distinguish FTM versus MTF, preoperative versus postoperative, nor IDU versus non-IDU. Further, these data do not include non-transgendered individuals who have sex with transgendered persons (e.g., MST, FST), although people who have sex with transgendered persons are included in the BRP matrix. Finally, data on transgendered persons may appear in other categories, such as MSM and MSM-IDU.

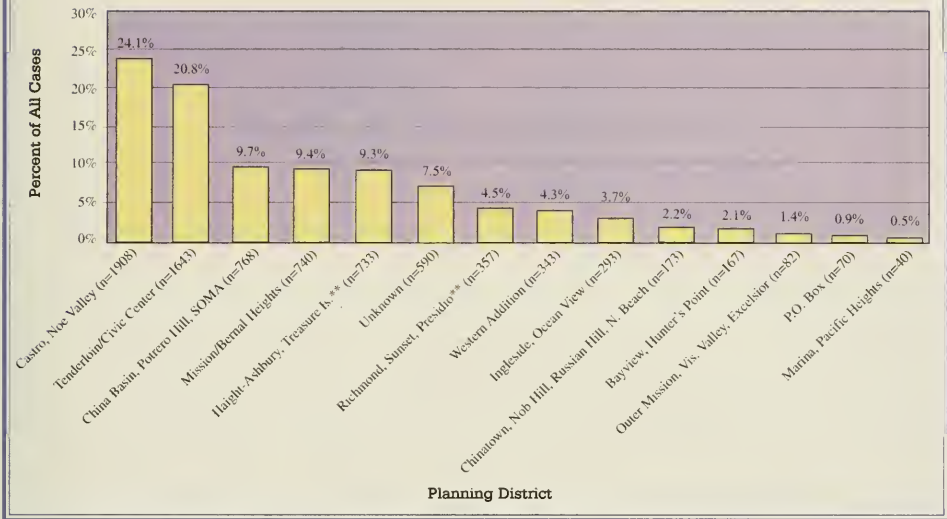
The composition of San Francisco's AIDS epidemic is remarkably different from the national profile. Exhibit 24 shows that 73% of living



Source: SFPDP. AIDS Office, Seroepidemiology and Surveillance Section. Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 31, 2000.

Note: The 25-29 age group includes 38 transgendered cases between 13-29. The 30 to 39 age group includes 90 transgendered cases over 30.

### EXHIBIT 23. LIVING AIDS CASES BY PLANNING DISTRICT, SAN FRANCISCO, DECEMBER 2000\*



Source: SFPDPH AIDS Office, Seroepidemiology and Surveillance Section Special data run, March 2001.

\*This Exhibit excludes 966 cases that were diagnosed in San Francisco but were residents of other jurisdictions at the time of their AIDS diagnosis.

\*\*Treasure Island and the Presidio both account for less than five living AIDS cases.

AIDS cases in San Francisco continue to be among MSM. This compares to approximately 45% nationally. When combined with MSM-IDU, approximately 85% of living AIDS cases are among these populations. Of the MSM and MSM-IDU cases reported, 63% are among Whites, 8% are among African Americans, 11%

are among Latinos, 3% are among Asian/Pacific Islanders, and 0.4% are among Native Americans. When looking at each ethnic group separately, MSM and MSM-IDU consistently account for the majority of cases within each group.

### EXHIBIT 24. LIVING ADULT AND ADOLESCENT\* AIDS CASES BY BEHAVIORAL RISK POPULATION, SAN FRANCISCO, DECEMBER 2000

<i>Behavioral Risk Population</i>	<i>Number of Living AIDS Cases</i>	<i>Percent of Total Living AIDS Cases</i>
<b>MSM, MSM/F</b>		
Gay or bisexual male	6,432	73.2%
<b>TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, FST/F and TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F-IDU, FST-IDU, FST/M-IDU, FST/F-IDU</b>		
Transgendered persons**	128	1.5%
<b>MSM-IDU, MSM/F-IDU</b>		
Gay or bisexual male IDU	1,000	11.4%
<b>FSM-IDU, FSM/F-IDU, FSF-IDU</b>		
Heterosexual female IDU	286	3.3%
Lesbian or bisexual female IDU	20	0.2%
<b>MSF-IDU</b>		
Heterosexual male IDU	562	6.4%
<b>FSM, FSM/F, FSF</b>		
Heterosexual female	167	1.9%
<b>MSF</b>		
Heterosexual male	41	0.5%
<b>No BRP</b>		
Blood products recipient	35	0.4%
None of the above/Other	96	1.1%
<b>Total</b>	<b>8,783</b>	<b>99.9%</b>

Sources: San Francisco Department of Public Health, AIDS Office, Seroepidemiology and Surveillance Section. Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 31, 2000.

\*Persons over 12 years of age are categorized as adults and adolescents.

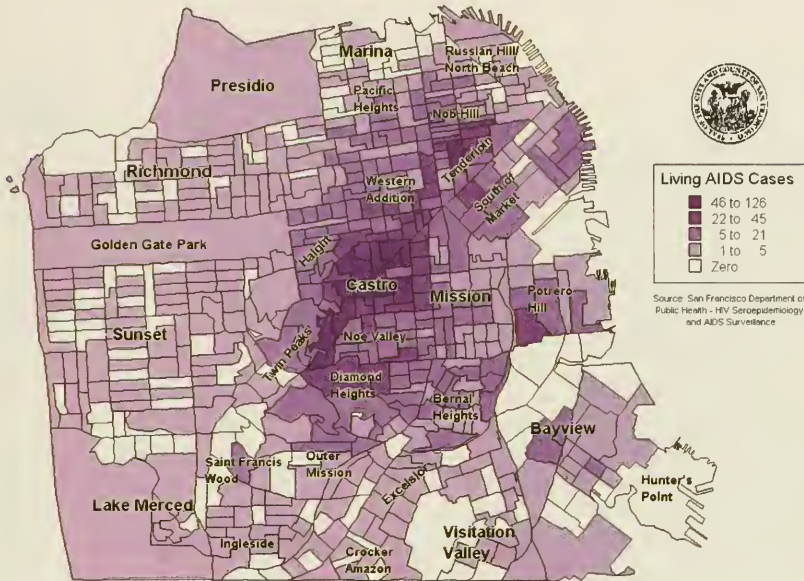
\*\*Data on transgendered individuals does not currently distinguish among FTM, MTF preoperative, and postoperative, nor does it distinguish IDU and non-IDU. Further, these data do not include non-transgendered individuals who have sex with transgendered persons (e.g., MST, FST). Finally, data on transgendered persons may appear in other categories, such as MSM and MSM-IDU.

Exhibits 25 through 38 show the geographic distribution of living AIDS cases in San Francisco for each BRP. Each of the BRP maps is followed by an exhibit that displays the number of living AIDS cases and percent of total living AIDS cases by ethnic group within that BRP. The purpose of the maps is to provide a visual representation of the neighborhoods of the city that bear the highest burden of disease. Note that the scales on the maps are different, due to the different numbers of infections in each BRP. A shaded area on one map does not represent the same number of cases as a similarly shaded area on another; therefore, they should not be compared to each other.

In comparison with their overall numbers in the San Francisco population, African Americans are disproportionately represented in all the BRPs, with the exception of MSM, MSM/F. Whites are similarly overrepresented in the MSM, MSM/F and MSM-IDU, MSM/F-IDU categories. Latinos are slightly overrepresented in the MSF category, and substantially overrepresented in the transgendered BRPs. Asian/Pacific Islanders have fewer living AIDS cases in each of the BRPs than would be expected given their proportions in the overall San Francisco population.



### EXHIBIT 25. MAP OF LIVING AIDS CASES AMONG MSM AND MSM/F, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*



### EXHIBIT 26: LIVING AIDS CASES AMONG MSM AND MSM/F, BY RACE/ETHNICITY, DECEMBER 2000\*

<i>Race/Ethnicity</i>	<i>Number of Living AIDS Cases</i>	<i>Percent of Total Living AIDS Cases</i>
African American	448	7.9%
API	202	3.6%
Latino	744	13.1%
White	4,248	75.0%
Other	20	0.4%
<b>Total</b>	<b>5,662</b>	<b>100.0%</b>

\*Exhibits 25 and 26 include those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded.

### EXHIBIT 27. MAP OF LIVING AIDS CASES AMONG TRANSGENDERED PERSONS, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*



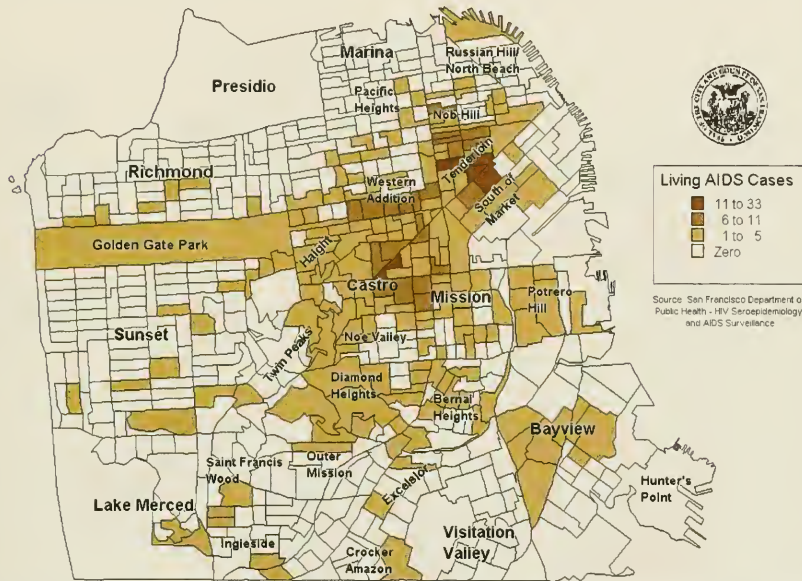
### EXHIBIT 28: LIVING AIDS CASES AMONG TRANSGENDERED PERSONS BY RACE/ETHNICITY, DECEMBER 2000\*

Race/Ethnicity	Number of Living AIDS Cases	Percent of Total Living AIDS Cases
African American	44	35.8%
API	13	10.6%
Latino	34	27.6%
White	31	25.2%
Other	<5	0.8
<b>Total</b>	<b>123</b>	<b>100.0%</b>

\*Exhibits 27 and 28 include those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded. They also include only transgendered persons, and not persons who have sex with transgendered persons (e.g., MST, FST).



### EXHIBIT 29. MAP OF LIVING AIDS CASES AMONG MSM-IDU AND MSM/F-IDU, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*

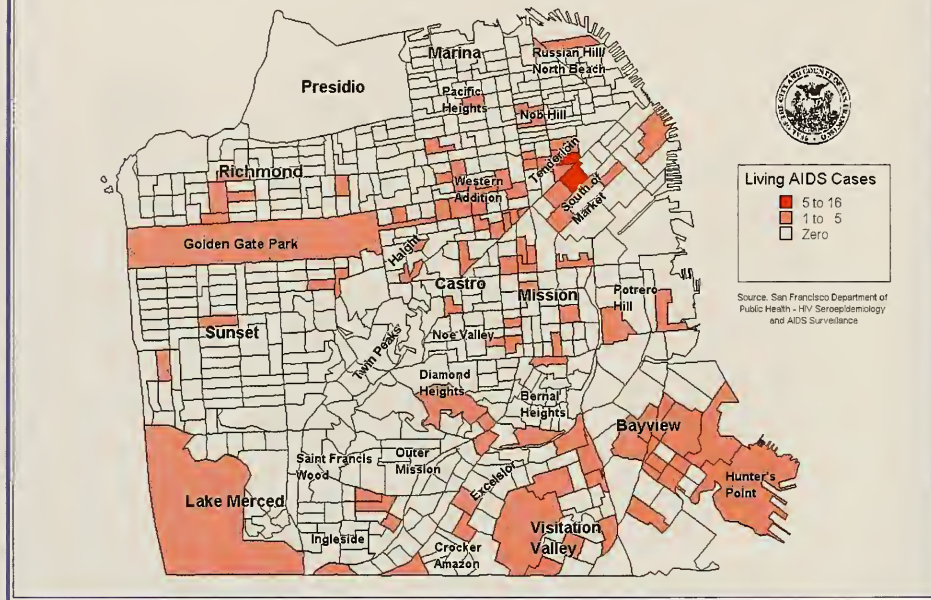


### EXHIBIT 30: LIVING AIDS CASES AMONG MSM-IDU AND MSM/F-IDU, BY RACE/ETHNICITY, DECEMBER 2000\*

<i>Race/Ethnicity</i>	<i>Number of Living AIDS Cases</i>	<i>Percent of Total Living AIDS Cases</i>
African American	176	18.5%
API	15	1.6%
Latino	103	10.8%
White	646	68.0%
Other	10	1.1%
<b>Total</b>	<b>950</b>	<b>100.0%</b>

\*Exhibits 29 and 30 include those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded

### EXHIBIT 31. MAP OF LIVING AIDS CASES AMONG FSM-IDU, FSM/F-IDU, AND FSF-IDU, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*

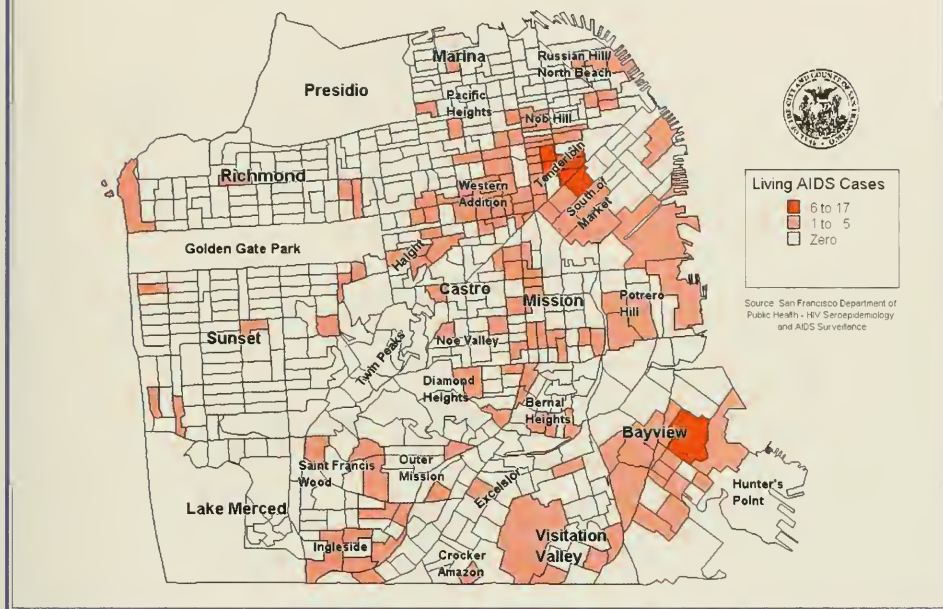


### EXHIBIT 32: LIVING AIDS CASES AMONG FSM-IDU, FSM/F-IDU, AND FSF-IDU, BY RACE/ETHNICITY, DECEMBER 2000\*

Race/Ethnicity	Number of Living AIDS Cases	Percent of Total Living AIDS Cases
African American	151	52.6%
API	11	3.8%
Latino	29	10.1%
White	91	31.7%
Other	5	1.7%
<b>Total</b>	<b>287</b>	<b>100.0%</b>

\*Exhibits 31 and 32 include those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded.

**EXHIBIT 33. MAP OF LIVING AIDS CASES AMONG MSF-IDU, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\***



**EXHIBIT 34: LIVING AIDS CASES AMONG MSF-IDU, BY RACE/ETHNICITY, DECEMBER 2000\***

<i>Race/Ethnicity</i>	<i>Number of Living AIDS Cases</i>	<i>Percent of Total Living AIDS Cases</i>
African American	247	47.1%
API	10	1.9%
Latino	64	12.2%
White	197	37.6%
Other	6	1.1%
<b>Total</b>	<b>524</b>	<b>100.0%</b>

\*Exhibits 33 and 34 include those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded



### EXHIBIT 35. MAP OF LIVING AIDS CASES AMONG FSM, FSM/F, AND FSF, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*



### EXHIBIT 36: LIVING AIDS CASES AMONG FSM, FSM/F, AND FSF, BY RACE/ETHNICITY, DECEMBER 2000\*

Race/Ethnicity	Number of Living AIDS Cases	Percent of Total Living AIDS Cases
African American	49	42.6%
API	10	8.7%
Latino	24	20.9%
White	31	27.0%
Other	<5	0.9%
<b>Total</b>	<b>115</b>	<b>100.0%</b>

\* Exhibits 35 and 36 include those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded.



### EXHIBIT 37. MAP OF LIVING AIDS CASES AMONG MSF, BY SAN FRANCISCO NEIGHBORHOOD, DECEMBER 2000\*



### EXHIBIT 38: LIVING AIDS CASES AMONG MSF, BY RACE/ETHNICITY, DECEMBER 2000\*

<i>Race/Ethnicity</i>	<i>Number of Living AIDS Cases</i>	<i>Percent of Total Living AIDS Cases</i>
African American	10	32.3%
API	0	0.0%
Latino	10	32.3%
White	11	35.5%
Other	0	0.0%
<b>Total</b>	<b>31</b>	<b>100.0%</b>

\*Exhibits 37 and 38 include those individuals living in San Francisco at the time of AIDS diagnosis who had valid street addresses. Therefore, homeless individuals, those with PO Boxes, those reporting a false or no address, those who were diagnosed in San Francisco but do not live in San Francisco, and those who were diagnosed elsewhere but now live in San Francisco are excluded

## RECENT AIDS CASES (1997-2000)

Recent AIDS cases refers to the number of new AIDS cases diagnosed between January 1, 1997 and December 31, 2000.

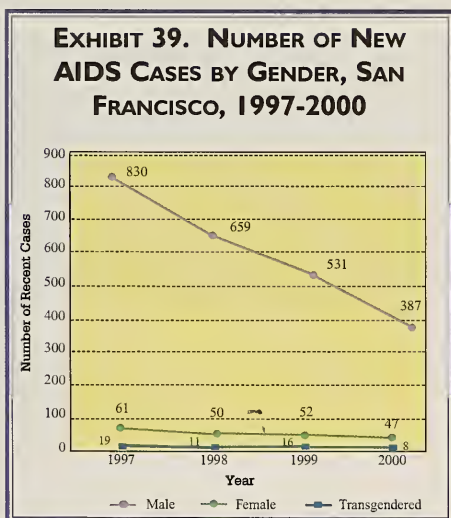
### RECENT AIDS CASES BY GENDER

Males in San Francisco make up the majority of new AIDS cases diagnosed between 1997 and 2000. Over that period, there has been a 53% drop in the number of new diagnoses made among this population. Still, males make up 90% of all new AIDS cases diagnosed between 1997 and 2000. The decline in new diagnoses is less dramatic for women and transgendered persons. Women, who account for 6% of living AIDS cases and 8% of new cases between 1997 and 2000, have only seen a drop in new diagnoses of 23% over the period. Transgendered persons, whose numbers may be substantially underreported in new diagnoses made over the

period, have seen a 56% drop in new cases, though the numbers are quite small. Between 1997 and 2000, a total of 54 AIDS cases have been diagnosed among transgendered persons. Considering the high prevalence in this population, difficulty accessing needed health care and other services to treat HIV infection, and the many problems associated with disclosure in the health care setting, the actual number of cases is likely much higher. Exhibit 39 shows the number of new AIDS cases by gender in San Francisco between 1997 and 2000.

### RECENT AIDS CASES BY RACE/ ETHNICITY

Exhibit 40 shows the distribution of recent AIDS cases by race/ethnicity between 1997 and 2000. Whites make up the majority of new cases, although the number of new cases diagnosed among this population over the period has dropped at a faster rate than any other racial/ethnic group. Between 1997 and the end of 2000, the number of new AIDS cases among Whites has decreased by 57%. African Americans have also seen consistent declines in new diagnoses made, but not at the same rate as Whites. Between 1997 and 2000, new cases among African Americans have dropped 44%. As a percent of the total new cases in 1997, Whites made up approximately 65% of new cases, declining to 57% by 2000. Although new AIDS cases occur mostly among Whites, the proportion of new AIDS cases among communities of color has increased over the four year period 1997 to 2000. African Americans' percent of new cases over the same period has risen from 18% of total new cases in 1997 to 21% in 2000. Latinos and Asian/Pacific Islanders have also experienced an increase in their percent of the total new cases diagnosed over the period, with Latinos' percent of the total rising from 13% in 1997 to nearly 17% in 2000. Asian/Pacific Islanders have seen their percent of total cases increase slightly from 3.8% in 1997 to 4.7% in 2000. In summary, there has been an overall decline in new cases for all racial/ethnic



Source: SFPDH AIDS Office, Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 2000.

**EXHIBIT 40. NUMBER OF NEW AIDS CASES BY RACE/ETHNICITY,  
SAN FRANCISCO, 1997-2000**

	1997		1998		1999		2000	
<i>Race/Ethnicity</i>	<i>Number</i>	<i>% of All Cases</i>	<i>Number</i>	<i>% of All Cases</i>	<i>Number</i>	<i>% of All Cases</i>	<i>Number</i>	<i>% of All Cases</i>
White	585	64.6%	468	65.0%	351	58.6%	252	57.0%
African American	167	18.4%	149	20.7%	117	19.5%	93	21.0%
Latino	120	13.2%	73	10.1%	99	16.5%	74	16.7%
Asian/ Pacific Islander	34	3.8%	28	3.9%	27	4.5%	21	4.7%
Native American	4	0.4%	2	0.3%	5	0.8%	2	0.4%
<b>Total</b>	<b>906</b>	<b>100.0%</b>	<b>720</b>	<b>100.0%</b>	<b>599</b>	<b>100.0%</b>	<b>442</b>	<b>100.0%</b>

Source: SFPDH AIDS Office, Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 2000.

groups, with the rate of decline greatest among Whites and corresponding increases in the proportion of new cases that are among people of color.

there is a slight increase in the percent of cases diagnosed among people over 40. This may indicate successful use of antiretroviral therapies, which delay the progression from HIV infection to diagnosed AIDS.

**RECENT AIDS CASES BY AGE GROUP**

Exhibit 41 shows the distribution of recent AIDS cases by age group between 1997 and 2000. The majority of new cases diagnosed fall in the 30-39 and 40-49 age groups in each of the four years of reporting. These two groups make up 76% of all new AIDS cases diagnosed between 1997 and 2000. The age at diagnosis has remained consistent, although it appears that

In the 20-24 age group, new cases declined between 1997 and 1999 and slightly increased in 2000, although the percent of total cases in each year among this group has remained relatively constant at approximately 2%. New cases diagnosed in the 25-29 age group have decreased dramatically from 1997 to 2000, with a high of 89 cases in 1997 (9.8% of total new cases) to a low of 34 cases by 2000 (6.5% of total new cases).

**EXHIBIT 41. NUMBER OF NEW AIDS CASES BY AGE, SAN FRANCISCO,  
REPORTED 1997-2000**

	1997		1998		1999		2000	
<i>Age at Diagnosis(years)</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>
0-19	5	0.6%	5	0.7%	4	0.7%	5	1.0%
20-24	20	2.2%	15	2.1%	8	1.3%	12	2.3%
25-29	89	9.8%	54	7.5%	41	6.8%	34	6.5%
30-39	377	41.4%	301	41.7%	267	44.4%	225	42.9%
40-49	293	32.2%	253	35.0%	210	34.9%	166	31.6%
50-59	105	11.5%	81	11.2%	61	10.2%	68	13.0%
60+	21	2.3%	13	1.8%	10	1.7%	15	2.9%
<b>Total</b>	<b>910</b>	<b>100.0%</b>	<b>722</b>	<b>100.0%</b>	<b>601</b>	<b>100.0%</b>	<b>525</b>	<b>100.0%</b>

Source: SFPDH AIDS Office, Seroepidemiology and Surveillance Section. Special data run, March 2001

## RECENT AIDS CASES BY PLANNING DISTRICT

Exhibit 42 shows that the highest burden of new AIDS cases reported between 1997 and 2000 are among residents of Planning District 7 (Castro, Noe Valley) and Planning District 4 (Tenderloin/Civic Center). These areas of the

City are home to large populations of gay and bisexual men and IDUs, the groups with the highest number of living AIDS and recent AIDS cases. Adjacent neighborhoods, such as those in Planning District 5 (Western Addition), Planning District 8 (Mission) and Planning District 9 (China Basin, Potrero Hill, and South of Market), also share the burden of disease.

<b>EXHIBIT 42. RECENT AIDS CASES BY SAN FRANCISCO PLANNING DISTRICT, 1997-2000</b>									
<i>Planning District</i>	<i>Zip Code(s)</i>	1997		1998		1999		2000	
		<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
1, Richmond, Presidio	94118, 94121, 94129	16	2.0%	11	1.6%	6	1.1%	10	2.1%
2, Marina & Pacific Heights	94123	<5	0.4%	<5	0.6%	<5	0.7%	<5	1.1%
3, Chinatown, Nob Hill, Russian Hill, North Beach	94108, 94111, 94133	11	1.4%	6	0.9%	11	2.0%	21	4.5%
4, Tenderloin/Civic Center	94102, 94109	161	20.0%	154	22.8%	105	18.9%	120	25.5%
5, Western Addition	94115	43	5.3%	27	4.0%	21	3.8%	19	4.0%
6, Haight-Ashbury/Treasure Island	94117, 94130	64	8.0%	47	7.0%	34	6.1%	32	6.8%
7, Castro, Noe Valley	94114, 94131	176	21.8%	119	17.7%	97	17.5%	65	13.8%
8, Mission & 11, Bernal Heights	94110	65	8.1%	64	9.5%	59	10.6%	30	6.4%
9, China Basin, Potrero Hill, South of Market	94103, 94104, 94105, 94107	87	10.8%	76	11.3%	69	12.4%	40	8.5%
10, Bayview, Hunter's Point	94124	23	2.9%	22	3.3%	15	2.7%	13	2.8%
12, Outer Mission, Visitation Valley, Excelsior	94134	15	1.9%	13	1.9%	7	1.3%	7	1.5%
13, Ingleside, Ocean View	94112, 94127, 94132	44	5.5%	33	4.9%	22	4.0%	18	3.8%
14, Inner Sunset & 15, Outer Sunset	94116, 94122	19	2.4%	15	2.2%	14	2.5%	8	1.7%
San Francisco PO Box	-	9	1.1%	7	1.0%	6	1.2%	5	1.1%
Unknown address	-	71	8.8%	76	11.3%	85	15.3%	80	17.0%
<b>Totals</b>		<b>807</b>	<b>100%</b>	<b>674</b>	<b>100%</b>	<b>555</b>	<b>100%</b>	<b>471</b>	<b>100%</b>

Source: SFPDH AIDS Office, Seroepidemiology and Surveillance Section. Special data run, March 2001.



## RECENT AIDS CASES BY BEHAVIORAL RISK POPULATION

Exhibit 43 shows the number of new AIDS cases by BRP reported between 1997 and 2000. MSM and MSM/F are the majority of new AIDS cases in San Francisco, making up 66% of all new cases reported between 1997 and 2000. When combined with MSM-IDU, this percent increases to 77%. Of all male IDU cases reported over the period, MSM-IDU make up a majority of cases at 52%. New AIDS cases among heterosexual male IDUs (MSF-IDU) have declined in each of the four years of reporting, although their percent of total new cases in each year has risen slightly from 10% in 1997 to nearly 12% by 2000. New female IDU cases, including FSM-IDU, FSM/F-IDU, and FSF-IDU, have remained fairly constant over the period, although their percent of total new cases diag-

nosed has increased from 3.7% in 1997 to 6.7% by 2000. These increases in the proportion of total cases among IDUs may be a result of the substantial decrease of new AIDS diagnoses among MSM and MSM/F.

Heterosexual, lesbian, and bisexual females (FSM, FSM/F, FSF) in San Francisco make up a small proportion of cases overall, and their percent of new cases has remained relatively low, going from 2.0% of new cases reported in 1997 to approximately 3.6% in 2000. The actual number of diagnoses made among females has remained fairly constant, between 13 and 19 per year.

New AIDS cases among children 12 and under and blood product recipients remain relatively rare in San Francisco.

**EXHIBIT 43. NUMBER OF NEW AIDS CASES BY BEHAVIORAL RISK POPULATION,  
SAN FRANCISCO, REPORTED 1997-2000**

	1997		1998		1999		2000	
<i>BRP</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F-IDU, FST-IDU, FST/M-IDU, FST/F-IDU Transgendered IDU*	12	1.3%	6	0.8%	5	0.8%	6	1.1%
TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, FST/F Transgendered non-IDU*	10	1.1%	6	0.8%	11	1.8%	4	0.8%
MSM-IDU, MSM/F-IDU MSM-IDU	84	9.2%	99	13.7%	68	11.3%	61	11.6%
MSM, MSM/F MSM	636	69.9%	479	66.3%	376	62.6%	316	60.2%
MSF-IDU Heterosexual male IDU	91	10.0%	68	9.4%	63	10.5%	61	11.6%
FSM-IDU, FSM/F-IDU, FSF-IDU Heterosexual female IDU	32	3.5%	29	4.0%	34	5.7%	33	6.3%
Lesbian or bisexual IDU	2	0.2%	2	0.3%	1	0.2%	2	0.4%
FSM, FSM/F, FSF Heterosexual female	18	2.0%	13	1.8%	15	2.5%	19	3.6%
MSF Heterosexual male	4	0.4%	2	0.3%	8	1.3%	6	1.1%
No BRP Blood products recipient	3	0.3%	3	0.4%	2	0.3%	3	0.6%
Pediatric** (0-12 years)	4	0.4%	5	0.7%	2	0.3%	2	0.4%
Other/Unknown	14	1.5%	10	1.4%	16	2.7%	12	2.3%
<b>Total</b>	<b>910</b>	<b>100.0%</b>	<b>722</b>	<b>100.0%</b>	<b>601</b>	<b>100.0%</b>	<b>525</b>	<b>100.0%</b>

Source: SFPDH AIDS Office, Quarterly AIDS Surveillance Report, AIDS Cases Reported through December 2000. Special data run, March 2001.

\*Data on transgendered individuals does not currently distinguish among FTM, MTF, preoperative, and postoperative. Further, these data do not include non-transgendered individuals who have sex with transgendered persons (e.g., MST, FST). Finally, data on transgendered persons may appear in other categories, such as MSM and MSM-IDU.

\*\*This category is the only one that includes cases from persons ages 0 to 12. The other transmission categories include only individuals above 12 years of age.

## Section V: SUMMARY OF BEHAVIORAL RISK STUDIES

### INTRODUCTION

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Behavioral risk studies conducted in San Francisco after 1997 are included in this section. Every attempt has been made to group studies by the BRPs used in HIV prevention planning and defined by the HPPC. However, many research studies define risk populations by other variables, such as race/ethnicity, gender, or age. In some instances, risk behaviors themselves define the population under study, such as injection drug use, without making distinctions of gender that are necessary to conform to the BRP matrix. Taking these factors into consideration, six distinctions for the presentation of behavioral risk study data were devised:

- Injection drug users (IDUs, including all sexual behavioral risk populations)
- Adult males who have sex with males (MSM) and males who have sex with males and females (MSM/F)
- Adult females who have sex with females (FSF) and females who have sex with males and females (FSM/F)
- Adult males who have sex with females (MSF) and females who have sex with males (FSM)
- MTF transgendered persons who have sex with males (TSM)
- Youth (Youth have been included as a separate population due to the high number of behavioral studies that have been conducted among this group since 1997. Studies on MSM are discussed in the MSM section, but youth have been studied extensively and merit a separate discussion.)

Studies referenced in this section, as well as additional behavioral studies, are listed in Appendix 3.

### INJECTION DRUG USERS

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This section includes studies on all sexual behavioral risk populations except transgendered IDUs, which are addressed later under MTF TSM. More in depth information can be found in the 1997 HIV Prevention Plan (HIV Prevention Planning Council, 1997, pp. 157-170).

High-risk behavior among IDUs and their partners remains one of the primary means of HIV transmission. While sharing injection equipment presents significant opportunity for contracting HIV, local research conducted prior to 1997 has shown that targeted interventions have lowered the unsterile needle sharing practices among IDUs in San Francisco (HIV Prevention Planning Council, 1997, pp. 157-170). This section presents behavioral studies conducted after 1997 that highlight the success of various prevention strategies targeted to IDU populations in San Francisco.

A recent report found that 60% of a cohort of 340 high-risk IDUs who reported syringe sharing at the initial interview reported quitting syringe sharing after enrolling in a syringe exchange program (Bluthenthal et al., 2000). Another study of participants attending the San Francisco needle exchange program (NEP) found that clients who more frequently received their needles from exchange programs were less likely to share needles and reuse needles and more likely to clean their skin prior to injecting. It is clear that NEPs remain one of the most effective means of reducing risk of transmission among IDUs. Studies have also shown that NEPs can attract very high-risk subgroups of IDUs, particularly frequent injectors and homeless injectors (Hahn et al., 1997).

Differences in the ethnic and age characteris-

tics of injectors were examined in a study by Kral et al. (Kral et al., 2000). The study found that younger IDUs were more likely to be White, be homeless, have injected amphetamines, and have been arrested in the past year. Older injectors were more likely to be African American and smoke crack cocaine, and they had been injecting for a mean of 18 years longer than younger IDUs. Among younger IDUs, sharing needles in the past month, drug overdose in the past 15 months, and high-risk sexual behaviors were more likely than among older IDUs. According to another study (Nemoto et al., 1999a), Filipino drug users, compared with Chinese users, had engaged in riskier injection drug use behaviors, having sex while on drugs, and having sex with other IDUs. The study suggests consideration of specific cultural factors among high-risk Asian and Pacific Islander groups when targeting HIV prevention programs.

MSM-IDU are at high risk for contracting HIV. Not only is needle sharing a significant risk for HIV transmission, but sexual risk taking appears to be extremely high among this group, particularly for gay-identified injectors. In the HPPC's 2001 Priority Setting Model, MSM-IDU populations exhibit the highest incidence rates of any group other than transgendered populations. During an MSM-IDU Community Forum conducted in San Francisco in April 2000, researchers, providers and community members discussed the many issues impacting the epidemic among MSM-IDU populations. Several important issues were raised that have implications for HIV prevention efforts targeting this population. For example, self-identity in terms of class and race may dictate drug of choice, while drug of choice affects frequency and amount of drug use and frequency of risky sexual behaviors. Drug use patterns were also cited as affecting risk-taking, with use ranging from occasional to chronic among gay- and bisexual-identified users.

It was also noted that whether one self-identifies as gay or as an IDU may play a role in the type and amount of risk that MSM-IDU take.

Some men may not identify as gay, and male-to-male sexual activity may be situational in nature, placing these men at extreme risk. For those men who do not identify as IDUs, drug use behavior may also be situational, occurring at specific times and in specific contexts where drug use is seen as a normal part of social activity.

From the discussion of MSM-IDU issues and needs, five program suggestions evolved: (1) provide MSM-IDU-specific needle exchange, (2) improve integration of services, (3) focus on harm reduction, (4) increase provider sensitivity to MSM-IDU, and (5) challenge community norms with community education.

## MSM AND MSM/F

The behavioral studies referred to in this section provide an overview of the current knowledge regarding risk behaviors among San Francisco's MSM population. Additional studies are provided in Appendix 3. Further discussion on MSM populations can be found in the 1997 HIV Prevention Plan (HIV Prevention Planning Council, 1997, pp. 171-189).

HIV prevention has had an impact on the high-risk behaviors of MSM and MSM/F, resulting in some of the most significant behavioral changes seen in the history of public health. Recent behavioral studies, however, indicate that MSM and MSM/F populations in San Francisco continue to engage in high-risk sexual behaviors. Despite consistent risk reduction messages targeted to MSM populations, a level of risk behavior has been sustained throughout the epidemic, and over the past three years, the risk has increased. Recent reports indicate that this rise in risk behaviors among MSM correlates with a rise in HIV incidence rates.

Evidence of increases in risk behaviors can be seen in several recent studies. Reports of unprotected anal intercourse, the highest sexual risk behavior for HIV transmission, increased



from 37% to 50% between 1993/1994 and 1996/1997 in the San Francisco Young Men's Health Study (Ekstrand et al., 1999). Alarmingly, almost half of men practicing unprotected anal intercourse did so with a partner of unknown or discordant HIV status. The study found that high-risk behaviors were correlated with a number of factors including the use of nitrite inhalants (poppers), sex in commercial sex environments, perceived difficulty controlling sexual risk-taking, and greater numbers of male sex partners. Another study found that men who engaged in unprotected anal intercourse were twice as likely to be involved in a new primary relationship as those who did not, and that the period following loss of a partner to AIDS increased risk-taking (Mayne et al., 1998).

Low AIDS knowledge among some MSM populations continues to be a significant risk problem. In a study conducted by San Francisco's AIDS Health Project (Dilley et al., 1998), unprotected anal sex among 55 self-identified urban HIV-negative gay and bisexual men was associated with low AIDS knowledge and low condom self-efficacy. Even in an AIDS epicenter such as San Francisco, aggressive HIV prevention and education programs targeted to self-identified gay and bisexual men must remain a priority.

Due to the high prevalence of HIV among MSM populations, studies have examined the role of serostatus in sexual risk taking. One study found that men in concordant serostatus relationships reported higher rates of unprotected anal intercourse than discordant couples (Hoff et al., 1997). The study concluded that the lower rate of unprotected anal intercourse among men in discordant relationships compared to men in concordant relationships suggests judgments are being made about sex and behavior based on knowledge of one's own and one's partner's HIV status.

MSM-IDU are at significant risk for HIV infection, as discussed in the previous section. However, non-injecting substance use among MSM is also a co-factor for HIV transmission, and studies show a correlation between non-

injecting substance use and risk behaviors. A recent report in San Francisco found that among a sample of 337 baseline HIV-negative gay men that were followed for 6 years, seroconverters were consistently more likely to report use of marijuana, nitrite inhalants (poppers), amphetamines, and cocaine than were nonconverters (Chesney et al., 1998). The study also found that consistent use of nitrite inhalants and amphetamines increases the relative risk of seroconversion, although periodic use does not.

Some studies have found the largest increases in sexual risk taking among young gay and bisexual men. Data from STOP AIDS Project surveys conducted between 1994 and 1997 and from San Francisco's STD surveillance program were analyzed to document changes in risk behaviors and male rectal gonorrhea rates (MMWR, 1999). The behavioral data indicated increases in risk behaviors were happening among men less than 25 years old more than in any other age group. Data also found that one third of men reported unprotected anal intercourse with multiple partners during the previous six months, and the proportion of men always using condoms declined from 69.9% in 1994 to 60.8% in 1997. After a decline in male rectal gonorrhea between 1990 and 1993, the study found an increase in incidence from 21 to 38 per 100,000 adult men from 1994 through 1997.

In another study related to sexual risk among young gay men, self-perceived HIV status was examined as a predictor of HIV sexual risk taking among gay and bisexual men between 18 and 29 years old (Ekstrand et al., 1999). Of 408 men recruited and interviewed, 37% reported engaging in unprotected anal intercourse during the past year, including 59% of the men who knew they were HIV-positive, 35% of the men who perceived themselves HIV-negative and 28% of the untested men. The study suggests that perception or knowledge of HIV status among young gay men does not necessarily translate into reduced risk taking.

Young gay men are also highlighted in studies that draw an association between alcohol and non-injection drug use. Findings from the San Francisco Bay Area Young Men's Survey II (Waldo et al., 2000a), suggest a need for prevention programs that target younger, homeless IDUs. The evidence of a renewed epidemic among young gay and bisexual men is evident from these and other studies.

Recent studies have examined the psychosocial and cultural factors associated with risk behaviors as well as frequency of risk behaviors, providing important information for future prevention efforts. Findings from focus groups and individual interviews with gay/bisexual Latino men in the Bay Area found four "psychocultural" experiences as presenting major barriers to enactment of risk-protective behaviors, including the Latino values and norms of machismo, familismo, homophobia, and simpatica (Diaz, 1997).

## FSF AND FSM/F

Because the risk of female-to-female sexual transmission of HIV is thought to be lower than transmission via same gender sex between men or via sex between men and women, FSF have traditionally been thought of as a very low risk group. Similarly, FSM/F are often combined with FSF in studies and reports, and are also viewed as being at low risk. Due to these perceptions, FSF and FSM/F populations have not been studied as extensively as MSM and IDU populations in San Francisco. Those studies that have been conducted suggest the risk of transmission is related to unprotected sexual activity with male partners. This may be due, in part, to the fact that sexual identity does not always predict sexual behavior among FSF populations. Many women who identify as lesbian also have sex with men, while not all women who have sex with women identify as lesbian or bisexual, making it difficult to isolate risk behaviors among these groups. In addition to unprotected sex with male partners, injection

drug use is also known to be a significant risk factor for FSF and FSM/F populations.

A study of FSF-IDU in 19 United States cities including San Francisco found that both sexual risk behaviors and injection drug use were quite high (Kral et al., 1997). In the 30 days prior to the interview, 53% of women had shared syringes, and 66% had shared injection supplies. Only 11 women (6%) always used barrier protection while giving oral sex to women and 5 (3%) while receiving oral sex from women. Fifty percent had sex with men as well as women in the previous 30 days, and just 30% of women who reported sex with men had used condoms for penile-vaginal sex, while only 26% had used condoms for penile-anal sex.

Age may play a role in risk taking among bisexual women. In a study of homosexual, bisexual, and heterosexual male and female youths, bisexual youths, both male and female, were found to be at greatest risk (Rotheram-Borus et al., 1999). Reported sexual risks among this group were the highest, and their perceived risk for HIV transmission was relatively low.

## MSF AND FSM

Prevalence of HIV among non-injecting MSF and FSM remains relatively low in San Francisco. Engaging in unprotected sex with multiple partners, high-risk partners, and/or sex outside of primary relationships are the major risk behaviors for these populations.

Among FSM who do not fall into other risk categories, risk may also be related to the risk behaviors of their sexual partners (Battle et al., 1995). This is particularly troublesome since male-to-female transmission has been found to be eight times more efficient than female-to-male transmission (Padian et al., 1997). Women who may not be at risk due to their own sexual behaviors are still in need of prevention education regarding the potential risk of transmission through their regular sexual partners.

With the advent of new HIV therapies, perceived risk of transmission through sexual behaviors may be lower among heterosexual adults. The California Partners Study II (van der Straten et al., 1998) found that new HIV treatments may lead to decreased concerns about HIV transmission, particularly among seronegative partners in mixed antibody-status relationships. The need for education regarding the limitations of HIV therapy on HIV transmissibility should be included in education efforts targeting this population.

An important co-factor related to sexual risk-taking among adult African American women is a history of childhood sexual abuse and adult abusive relationships. One study found that a history of childhood sexual abuse was related to a number of health compromising behaviors among a cohort of African American women, including HIV-related sexual risks (Wingood and DiClemente, 1997a). The authors suggest that awareness of a woman's history of child sexual abuse can lead to more tailored HIV prevention programs for African American women. In a related study, they also found that African American women in abusive relationships were less likely than others to use condoms and were more likely to experience verbal abuse, emotional abuse, or threats of physical abuse when they used condoms (Wingood and DiClemente, 1997b).

While injection drug use continues to be the single highest risk factor for HIV transmission among heterosexual men and women, non-injection drug use, including use of crack, cocaine, and alcohol, can lead to sexual risk among this population. Addiction treatment that includes risk reduction counseling was shown to reduce sexual risk taking among a cohort study of 700 self-identified alcoholics recruited from public alcohol treatment centers (Avins et al., 1997).

## MTF TSM

Transgendered populations have not been the primary focus of behavioral research studies until recently. It was not until community planning efforts highlighted the specific needs and risks of transgendered people that this population became a focus of study in care and prevention areas. In San Francisco, it was not until 1996 that a category for transgendered persons was included in HIV and AIDS surveillance efforts. More recently, transgendered persons have been recategorized in San Francisco's BRP matrix; they used to be identified as part of the other BRP groups, but now they are included in their own BRP. With more and more information about transgendered populations becoming available, alarming high-risk sexual and drug use behaviors, related to psychosocial and economic hardships, are coming to light. Transgendered persons in San Francisco have high rates of exchanging sex for drugs and of injection drug use, and some transgendered persons share needles used to inject hormones (although hormone needle sharing rates are very low in San Francisco). Additionally, significant barriers to treatment and care exist among this group, in part due to discrimination from health care providers and the fear of disclosing their gender identity to professionals.

The Transgender Community Health Project study conducted in 1997 assessed HIV risk among MTF and FTM transgendered persons in San Francisco (Clements et al., 1999; Clements et al., 2001). High levels of lifetime HIV risk behaviors among MTF individuals, including sex work (80%), unprotected receptive anal sex (85%), and injection drug use (34%) were documented. In a series of focus groups as part of the study, participants also reported similar high-risk behaviors. Barriers associated with adopting and maintaining low-risk behaviors included low self-esteem, economic necessity, and substance abuse. Many individuals did not access prevention and health services because of competing priorities and the insensitivity of service providers. Participants' recommenda-



tions for improving services include hiring transgendered persons to develop and implement programs and training existing providers in sensitivity to and standards of care for transgendered persons.

A study by Nemoto et al. compared HIV risk behaviors among MTF with homosexual and bisexual males in San Francisco (Nemoto et al., 1999b). Risk behaviors, including number of sex partners in the past 30 days and past six months, commercial sex activities, and having a steady sex partner who injected drugs were higher among the transgendered group than the homosexual or bisexual male group. Adverse socioeconomic conditions and transgender-specific risk behaviors, such as injecting hormones, in relation to HIV risk behaviors must be targeted by future intervention studies.

## YOUTH

HIV prevention planning in San Francisco is based on BRPs, and the previous narratives have summarized behavioral research findings roughly according to these categories. However, a body of research pertaining to youth and youth issues has emerged since 1997. This research does not fit into the BRP approach, and therefore has been given its own descriptive section.

Adolescence is a developmental landmark when many young people initiate their sexual lives and experiment with alcohol and drug use. Many factors contribute to the risk for HIV infection that accompanies youths' initial involvement in sexual and drug use activities. This summary discusses recent behavioral studies published after 1997 that focus on youth as a target age group. Other studies that include youth in the sample are not summarized here. Instead, they are discussed in the section on the relevant BRP. For example, studies that include young males who have sex with males can be found in the MSM and MSM/F section.

Various behaviors including drug and alcohol use put youth at risk for HIV infection. While injection drug use is a primary and direct means of HIV transmission, use of alcohol and drugs during sex often predicts unsafe behavior, such as intercourse without the use of condoms or other protection. Further, behavioral data on youth alcohol and drug use are helpful for providers, as they often predict involvement in other high-risk behaviors such as commercial sex and sex with multiple partners. Situational factors, such as homelessness and being a runaway, have a substantial impact on the types of risks youth engage in, and these groups have been studied more extensively than other at-risk youth.

In terms of drug use behaviors, several recent studies have shown that homeless and runaway youth exhibit much higher rates of injecting and non-injecting drug use, including needle sharing and reuse, than other groups. A study of homeless, runaway, and street youth in San Francisco found that White heterosexual male youth without stable housing reported higher rates of injection and other drug use and non-condom use with female sexual partners than youth with stable housing (Clements et al., 1997). In addition, youth using any heroin, methamphetamine, or cocaine exhibited more sexual risks than non-users (Gleghorn et al., 1998). Further evidence of risky drug use behaviors among vulnerable youth populations is presented in a study of runaway and homeless adolescents in three American cities, including San Francisco (Kral et al., 1997). Of 775 runaway and homeless adolescents recruited from street settings and youth agencies, 21% had injected drugs and 75% reported having had sex while under the influence of alcohol or drugs.

High rates of sexual activity, early age of sexual debut, multiple sexual partners, and not using protection during sexual encounters are indicators of HIV risk for San Francisco youth. Variations in sexual risk acts and the social-cognitive mediators of sexual acts were examined among young homosexual, bisexual, and



heterosexual males and females ( $n = 478$ ; 13-21 years of age) from four community-based agencies in New York City, San Francisco, and Los Angeles (Rotheram-Borus et al., 1999). The prevalence and frequency of sexual risk acts varied by gender but were similar across youth of different sexual orientations, ethnicities, and ages. Homosexual youths reported a gap between their positive attitudes toward HIV prevention and their skills to implement safer

sex acts, particularly under social pressure. Bisexual youths appeared at greatest risk; their reports of sexual risk were the highest, yet their perceived risk for HIV was relatively low, and skills and knowledge were moderate (relative to their peers). Heterosexual youths appear at high risk for HIV based on reports of low rates of condom use and HIV-related beliefs and attitudes. However, heterosexual youths demonstrated the highest level of condom skills.

## Section VI: CO-FACTORS



**Co-factor.** A condition that can increase risk for HIV, increase susceptibility to infection, or decrease ability to receive and act upon HIV prevention messages.

### INTRODUCTION

Co-factors, along with primary risks such as sharing unsterile needles and having unprotected sex, are critical considerations in HIV prevention planning and implementation. This section contains a brief discussion of several co-factors. The co-factors presented here are not exhaustive; providers are encouraged to determine the presence of additional co-factors for their specific target populations. Readers are referred to the 1997 HIV Prevention Plan for more in-depth information on each co-factor and the published references that support the material written here. (At the end of each co-factor description, the relevant page numbers from the 1997 Plan are cited.) Some co-factors have been included that were not discussed in the 1997 Plan, and the published references for those co-factors are cited here.

There are two ways in which a co-factor can increase susceptibility to HIV infection: (1) the co-factor motivates or increases the likelihood of engaging in a risk behavior (e.g., low self-esteem, lack of social support, depression, com-

mercial sex work, low perception of risk); or (2) the co-factor increases the likelihood of contracting HIV if exposed (e.g., presence of an STD, malnutrition, immunosuppression caused by drug use or other factors).

Individuals may face multiple co-factors at once. In fact, certain clusters of co-factors tend to occur, such as poverty, discrimination, substance use, and STDs. Because these co-factors are usually present in clusters, the ability to discern the contribution of a single co-factor to HIV risk or infection is limited. Several studies have examined clusters of co-factors (namely, depression, self-esteem, and lack of social support), but there has been no study that examines the entire set of co-factors to determine the relative contribution of each to HIV risk. In fact, such a study is difficult to imagine, because people are extremely complex beings with a great number of motivations. However, some studies have teased out the connection between one or more co-factors and HIV risk. In recent years, the methods used in these studies have improved regarding the representation of people of color and women, and many of them are conducted with participants in San Francisco. So, while there are no definitive answers about the precise contribution of one or another co-factor to HIV risk, numerous studies provide evidence about the role that these co-factors play in the epidemic.

## **BIOLOGICAL FACTORS**

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### **SEXUALLY TRANSMITTED DISEASES**

The presence of an STD other than HIV, such as gonorrhea, rectal gonorrhea, syphilis, chlamydia, or hepatitis, may indicate risk for HIV infection (i.e., the same behaviors that lead to acquiring an STD can lead to contracting HIV). The presence of hepatitis may indicate risk behavior related to injection drug use, as well as sexual risk behavior. In addition, having an STD, especially an ulcerative STD, may lead to increased biological risk for acquiring or transmitting HIV. Young people and commercial sex workers are particularly affected by STDs. In San Francisco in 2001, African Americans in general, and young African American women specifically, continue to be disproportionately affected by STDs. In addition, rectal gonorrhea cases have been increasing among gay men. (HIV Prevention Planning Council, 1997, pp. 288-295)

## **ECONOMIC FACTORS**

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### **POVERTY**

Low socioeconomic status is one of the most consistent determinants of poor health status. Impoverished individuals experience greater incidence and mortality rates for most major chronic diseases and infections, including HIV infection. Some of the factors associated with poverty that may contribute to increased risk for HIV include lack of access to health services, social and physical environments unsupportive of healthy behavior, injection drug use and other substance use, commercial sex work, multiple sex partners, sex with partners who are high-risk, low perception of risk, prioritization of immediate needs such as finding food over issues with longer-term implications such as HIV, and poor nutrition. While these individual behaviors and conditions provide a context for understanding why poor people are at increased risk for HIV infection, they should not draw

attention away from the larger social and political responsibility to address the root causes of poverty. In San Francisco, children, people of color, and particularly women of color are disproportionately represented among those living in poverty. (HIV Prevention Planning Council, 1997, pp. 296-299)

### **HOMELESSNESS**

The definition of homeless may encompass those living on the streets, in abandoned buildings, in shelters, or any space not designated for shelter (e.g., cars), as well as those living in unstable conditions such as people temporarily staying with friends or family, people in single room occupancy hotels, people in a room or apartment but without financial stability to continue paying for housing, and people without a permanent address. HIV prevalence among homeless populations is likely higher than for housed people. Many of the risks described for poverty also apply to homelessness and may have more powerful effects for homeless people, who are living in a more extreme form of poverty. Some factors related to homelessness in particular and that may also lead to increased HIV risk include: impaired mental health status, higher rates of substance use, dual diagnosis with mental health and substance abuse issues, exposure to physical and sexual violence, and lack of access to prevention messages and services. Youth, women, children, and people of color are particularly affected by homelessness in San Francisco. See <http://www.sf-homeless-coalition.org/hlsinsf.html> for more information about homelessness in San Francisco. (HIV Prevention Planning Council, 1997, pp. 299-304)

## **ABUSE-RELATED CO-FACTORS**

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### **HISTORY OF CHILDHOOD SEXUAL ABUSE**

A history of childhood sexual abuse has been

associated with being HIV-positive and with greater HIV risk behavior later in life. The ways in which such abuse may be linked to increased risk of acquiring HIV are: (1) transmission may occur during the unwanted sexual act; (2) a history of sexual abuse may be related to subsequent HIV risk behaviors or co-factors, such as substance abuse, injection drug use, needle sharing, commercial sex work, unprotected anal sex, multiple sex partners, and mental health issues; and (3) a history of sexual abuse may impede a person's ability to respond to HIV prevention education and engage in HIV preventive behaviors. Women and gay and bisexual men are thought to have the highest prevalence of a history of sexual abuse, but this information is limited given the likelihood of underreporting of abuse in general, and particularly among heterosexual men. Other groups affected by this co-factor include teenage runaways, homeless people (particularly homeless women), adults with chronic mental health issues such as depression, hearing-impaired children, and incarcerated women. (HIV Prevention Planning Council, 1997, pp. 305-311)

## **HISTORY OF ABUSIVE RELATIONSHIPS**

A history of childhood sexual abuse, described in the previous paragraph, may predispose involvement in adult abusive relationships, and these abusive relationships themselves also may affect HIV risk behavior. The ways in which having a history of abusive relationships may be linked to increased risk of acquiring HIV are: (1) transmission may occur during abusive sexual acts; and (2) a history of abusive relationships may be related to subsequent HIV risk behaviors or co-factors, such as homelessness among women, inability to negotiate condom use or safer sex, and learned helplessness. Groups that are believed to be particularly affected by abusive relationships include those with a history of childhood sexual abuse, alcoholic women, and incarcerated men and women. (HIV Prevention Planning Council,

1997, pp. 311-312)

## **RAPE**

Rape is any sexual assault or forced sexual encounter regardless of the type of contact or relationship to perpetrator. HIV transmission may occur during the rape, but this risk is probably low. However, several factors may contribute to increased risk: condoms are rarely used during sexual assault; forced sex may rupture genital or anal tissue making HIV transmission more likely; assailants may have multiple sexual partners and use substances more than non-sex offenders, increasing their risk of being HIV-infected; assailants may have STDs at higher rates than non-sex offenders; and rape by multiple assailants (i.e., gang rape) increases the probability of exposure to HIV. In addition, the rape survivor may experience post-traumatic stress, depression, and feelings of powerlessness, which can all contribute to a decreased sense of self-efficacy, particularly during sexual encounters, which in turn could affect the survivor's ability to engage in HIV self-protective measures after the assault. While anyone may be a potential target for rape, women, homeless women, commercial sex workers, substance users (especially crack), incarcerated men, and men appearing vulnerable or feminine are more likely to be targeted. (HIV Prevention Planning Council, 1997, pp. 313-314)

## **PSYCHOLOGICAL CO-FACTORS**

### **SOCIAL SUPPORT**

Social support and social networks can affect a person's health-related and risk-taking behavior, either positively or negatively. Among the vulnerable populations that are often targeted for HIV prevention (e.g., IDUs, homeless women), it appears that social support has less effect on HIV disease prevention. The connection between social support and HIV-protective



behaviors or HIV-related behavior change appears to be stronger among gay men, especially White and African American gay and bisexual men, than among other populations affected by HIV. Social support has also been highly correlated with self-esteem, another HIV-related co-factor. In summary, among those populations for whom social support reduces HIV risk, "social support acts as a resource providing encouragement to the recipient, and as such promotes health protection" (Kobasa et al., 1985). In terms of social support's effect on HIV prevention, it is tentatively suggested that the issue is less social support per se and more the norms of the support network. Those support networks that emphasize healthy behaviors are more likely to help people reduce their risk for HIV. (HIV Prevention Planning Council, 1997, pp. 315-318)

## MENTAL HEALTH STRESSORS

Mental health stressors may be episodic or chronic conditions and include anxiety, depression, schizophrenia, and bipolar disorder. Stresses on mental health functioning influence thought and decision-making processes, can hinder physical functioning, and can increase risk for HIV infection. Institutionalized chronically mentally ill patients have been shown to have a higher prevalence of HIV than the general population (Tynes et al., 1993). One link between HIV risk and mental illness is that behaviors known to be associated with certain psychological disorders, such as "hypersexuality, poor impulse control, self-destructive behavior, casual sexual relationships, lack of awareness of risks, impaired judgment, substance use, and potential for sexual victimization" (Tynes et al., 1993), can lead to multiple partners, low levels of condom use, injection drug and other substance use, and relapse to unsafe behaviors, all of which increase HIV risk. Low levels of HIV/AIDS knowledge and low perceptions of risk among the chronically mentally ill also increase risk of HIV infection. Depression, an emotional state characterized by a lack of

energy, apathy towards oneself and others, and feelings of hopelessness and helplessness, can be a barrier to motivation for behavior change, maintenance of behavior change, and the acquisition of new skills. It may also reduce self-efficacy. Depression has been shown to be associated with high-risk behavior among several groups. Adverse or unjust circumstances, such as poverty, homelessness, discrimination, and grief or loss, may contribute to depression. Since IDUs, the gay community, and other groups at elevated risk for HIV infection experience many of these circumstances, they may be more likely to have depressive symptoms. San Francisco has a higher prevalence of diagnosed major depression, bipolar disorder, and schizophrenia than in California as a whole, and all demographic groups are affected by mental health stressors in San Francisco. (HIV Prevention Planning Council, 1997, pp. 318-321)

## SELF-ESTEEM

Self-esteem is used interchangeably with other terms such as self-regard, self-worth, self-acceptance, and self-image, and generally refers to the value that a person places on him or herself. The factors that largely determine self-esteem include a feeling of safety in one's environment, a sense of belonging and acceptance in important relationships, the ability to achieve the things that one values and an awareness of one's strengths and weaknesses, a realistic assessment of one's attributes, and a sense of purpose and ability to influence one's own life circumstances. The link between self-esteem and HIV risk is indirect. Self-esteem influences the motivation behind behaviors that may increase risk for HIV infection, such as injection drug use; non-injection substance use during sex; other self-destructive behaviors, such as involvement in abusive relationships and a desire for unprotected sex; ambivalence about one's own and potentially other's health in general; and valuing other's needs over one's own. One unpublished formative study in San Francisco (Flournoy, 1995) among IDUs, poly-



substance users, transgendered people, gay and bisexual men, and others at elevated risk for HIV infection found that feelings of low self-worth and hopelessness made HIV preventive behaviors unlikely. People of all ages, socioeconomic classes, and cultures may exhibit low levels of self-esteem. However, young people are likely more susceptible to self-esteem issues than other age groups. In addition, discrimination and socioeconomic imbalances can contribute to low self-esteem among disenfranchised communities, including communities of color, the gay/lesbian/bisexual community, the transgender community, those who are differently abled, and homeless and impoverished people. People who experience psychological or physical trauma, such as child abuse survivors, may also be vulnerable to low self-esteem. (HIV Prevention Planning Council, 1997, pp. 321-325)

## BEHAVIORAL CO-FACTORS

### LICIT AND ILLICIT SUBSTANCE USE/ABUSE

Non-injection substance use may inhibit a person's ability to make healthful judgments about sexual behavior or further drug use by decreasing inhibitions and ability to be discriminating. Alcohol and drugs, when used during sex, may alter a person's perception of risk, thus influencing the decision-making process of whether or not to use condoms. Further, use of drugs and alcohol may alter immune functioning either long-term or transiently, so that exposure may be more likely to produce infection. Psychoactive substances of concern for HIV prevention include (but are not limited to) alcohol, cocaine, speed, ecstasy, poppers, and crack. Because injection drug use is an HIV risk factor (i.e., a direct means of transmission), it is not discussed in this section, but it may also be a co-factor in the same way as non-injection drugs. Recreational psychoactive drug use has been associated with HIV sexual risk behaviors in some studies but not in others. The strongest associations between drug use and sexual risk-

taking are found when drugs are being used during sex. This phenomenon has been documented among homosexual and bisexual men as well as heterosexual men and women and adolescents. Homeless and runaway adolescents are also greatly affected by substance use in San Francisco. In San Francisco as well as nationally, lesbian, gay, and bisexual women and men, as well as transgendered individuals, appear to use alcohol and other drugs more often, in greater amounts, and in combination more frequently than the general population. (HIV Prevention Planning Council, 1997, pp. 326-337)

**Poppers.** The alkyl nitrites (amyl, butyl, isopropyl), or poppers (so nicknamed because of the sound the capsules make when crushed), are colorless or yellow liquids with an acrid odor. When inhaled, they cause intense flushing, a fall in blood pressure, and an increase in heart rate, accompanied by feelings of warmth, rapid pulse, throbbing sensations, and euphoria. In study after study, the use of poppers has been strongly associated with HIV risk behavior and seropositivity among MSM, but no studies of poppers' connection to HIV risk among other populations were found. Poppers relax the anal sphincter, making it easier to accept a partner's penis. They may also inhibit pain cues, increasing tolerance to rectal abrasions and prolonging intercourse. In addition, gay men who use poppers may feel less able to exert control over their sexual drives and involvement in risk behaviors. Use of poppers has been associated with unprotected anal sex with casual partners among young gay and bisexual men (Strathdee et al., 1998). (HIV Prevention Planning Council, 1997, pp. 331-333)

**Stimulants.** Illicit stimulants that may affect HIV-related behaviors include amphetamines such as cocaine and speed (also called crystal, methamphetamine or meth, crank, and ice). Both can be injected or snorted. Speed use has become increasingly popular among many population groups but appears particularly common among gay men in San Francisco (relative to other cities). Speed use in particular is report-

edly associated with both high-risk sexual and injection behaviors (Gorman and Carroll, 2000). Stimulants in general are frequently used during sex and are associated with unsafe sexual behaviors, such as unprotected anal sex among gay men and exchange of sex for money or drugs, and HIV seroconversion. (HIV Prevention Planning Council, 1997, pp. 327-328)

**Crack cocaine.** Crack is a smoke-able and highly addictive form of cocaine. Crack use has been associated with HIV-positive status and high-risk behaviors, such as not using condoms, having sex while under the influence of drugs or alcohol, commercial sex work, exchanging sex for money, crack, or other drugs, and multiple partners. In addition, crack has physical effects that may increase HIV risk, such as inhibition of ejaculation, which may lengthen the sex and thus increase skin abrasions that could lead to HIV transmission; sores on and around the mouth that could facilitate oral transmission; and impaired immune systems among frequent crack users. African Americans are disproportionately affected by crack use. (HIV Prevention Planning Council, 1997, pp. 328-330)

**Alcohol.** The connection between alcohol and HIV risk is much weaker than the connection between crack or poppers and HIV risk. Several studies have found a link between alcohol and sexual risk behavior, such as unprotected sex among heterosexual men and women, as well as higher prevalence of HIV among people in alcohol treatment. However, other studies have not found an association between alcohol use (general alcohol use and alcohol use during sex) and high-risk behavior or HIV infection. In summary, the relationship between alcohol use and involvement in risky behavior is complex. The mere use of alcohol does not appear to predict high-risk behavior, but the use of alcohol during sex may predict high-risk behavior, although it does not necessarily reduce people's ability to practice risk reduction. Alcohol use is of particular concern among adolescents, among whom it has been associated with lower rates of condom use and higher rates of STDs. Alcohol use can affect people of all demographic groups, but

in one national survey, Latinos had higher rates of alcohol use than other ethnic groups, and alcohol use was associated with having multiple partners among African Americans (Caetano and Hines, 1995). (HIV Prevention Planning Council, 1997, pp. 330-331)

**Other recreational drugs.** Other recreational drugs such as hallucinogens, Viagra, gamma-hydroxybutyrate (GHB), and ecstasy (methylenedioxymetamphatamine, or MDMA) have been posited to be related to HIV risk, especially among MSM (Gorman and Carroll, 2000, Sherr et al., 2000). Further, use of ecstasy or GHB by HIV-positive individuals taking antiretroviral medications could result in prolonged effects of the drug (Harrington et al., 1999), possibly contributing to a longer period during which high-risk behavior could occur, while also causing health-damaging or sometimes fatal effects. A study among young gay and bisexual men showed that risk-takers were more likely to report recreational drug use than non-risk takers (Strathdee et al., 1998). Viagra has been posited to affect HIV risk among older adults, for whom the resulting increased sexual activity may not be recognized as HIV risk behavior due to lack of knowledge or low perception of risk (Paniagua, 1999).

**Hormones.** Sharing needles during injection of hormones used to increase female secondary sexual characteristics has been shown to be a risk behavior among transgendered populations nationally, but the availability of hormone needles at needle exchange sites in San Francisco is responsible for low rates of hormone needle sharing locally. Further research is needed regarding this risk behavior (Bockting et al., 1998, Nemoto, 1999a). In one non-U.S. study, use of injectable hormones among transgendered persons was significantly associated with an increased risk of being HIV-infected (Aklilu et al., 2001). Because transgendered hormone users may not consider themselves IDUs, prevention messages and services targeting IDUs may not be appropriate for hormone users.

**Steroids.** Anabolic-androgenic steroids are

used in higher-than-therapeutic doses to improve endurance, strength, and muscle development and are administered by intramuscular injection by 50% of users in the U.S. (Rich et al., 1999). Related risk behaviors documented among steroid users include needle sharing, sharing of multi-dose vials, and dividing drugs using unsterile syringes (Midgley et al., 2000). Although HIV infections are not as common among steroid users as other IDUs, at least three HIV infections associated with steroid use have been documented in the world literature (Rich et al., 1999). Adolescent steroid users may be at especially high-risk, as 25% share needles while injecting (Rich et al., 1999). Further, one study showed that more steroid users reported increased sex drive than non-users, and more users had engaged in unprotected sex with multiple partners than did non-users (Midgley et al., 2000). Therefore, sexual risk behavior related to steroid use is also an important factor.

## COMMERCIAL SEX WORK

Commercial sex work is the exchange of sex for money, drugs, a place to stay, or any other perceived benefit. Commercial sex workers may be street-based or "off-street," i.e., based out of a home, apartment, hotel, massage parlor, or some other dwelling. High rates of HIV incidence and prevalence have been reported for populations of commercial sex workers in many places around the world as well as in San Francisco.

There are many reasons why commercial sex work can increase HIV risk. First, the high rates of STDs found among sex industry workers, especially those who use drugs, increase risk for HIV. Second, injection drug use (both a direct mode of transmission and a co-factor) and non-injection substance use appear to be more prevalent among sex workers than for those who do not trade sex, although a cause-effect relationship has not been established. Third,

the nature of sex work affects decisions about condom use (e.g., more money may be offered for sex without condoms, sex workers' perceived lack of power to negotiate for condom use, risk of violence). Fourth, the high numbers of sexual partners that characterize sex work increase the likelihood of exposure to HIV infection, and the risk is compounded by the fact that paying partners may themselves be either HIV-infected or at elevated risk for infection. Finally, commercial sex work is associated with other co-factors, such as poverty, child sexual abuse, low self-esteem, mental health issues, and vulnerability to physical and sexual assault. These risks are compounded by the illegal status of sex work, as this makes sex workers difficult to reach with HIV prevention interventions.

It is important to note that, in San Francisco, sex workers are thought to have lower infection rates, lower STD rates, and higher rates of condom use than in other cities, due at least in part to prevention efforts. Nevertheless, particular subgroups of sex workers experience different types and levels of risk. In overall numbers, the majority of sex workers are likely women, with men and transgendered people also involved. Most are estimated to be between 18 and 37 years old, although younger teenagers also engage in sex work. However, in proportion to their population size in San Francisco, transgendered individuals are estimated to be disproportionately involved in sex work and may experience greater risks for HIV infection than other groups because of the high prevalence of receptive anal sex with paying partners. Street-based sex workers may have higher risks than those working in off-street situations. Immigrant Asian/Pacific Islander women who sell sex in massage parlors may be a high-risk population among those working off-street because many of these women are required to provide risky services under threat of deportation and they may not have access to HIV prevention services. (HIV Prevention Planning Council, 1997, pp. 337-341)



## MULTIPLE PARTNERS AND HIGH-RISK PARTNERS

Most research considers "sex with multiple partners" to be sex with more than one partner in the past year. A high-risk sexual partner is typically defined as someone who is HIV-positive, uses or has used injection drugs, has been nonmonogamous, had a blood transfusion prior to 1985, or is a hemophiliac. (HIV Prevention Planning Council, 1997, pp. 342-344)

**Multiple partners.** HIV seropositivity has been associated with having multiple partners. Generally, people who have sex with multiple partners are at greater risk for HIV infection than those who have sex with a single partner because both the probability of contact with an infected individual and the probability of condom failure increases as the number of partners increases. Condom use patterns are important to consider when discussing the HIV risk associated with multiple partners. Condom use patterns with people who have multiple partners are often differentiated according to type of partner (i.e., whether the partner is primary or casual), whereby the typical pattern is little or no condom use with primary partners and higher (but not necessarily frequent or consistent) condom use with secondary partners. Across ethnicities, a higher percentage of men generally report multiple partners compared with women. Young adults 18 to 29 may also be more likely to have multiple partners than those over 30. Finally, in general, single people are more likely to have multiple partners than cohabitating or married people. (HIV Prevention Planning Council, 1997, pp. 342-344)

**High-risk partners.** People can also be at risk as a result of their partners' behaviors. For example, married women are unlikely to use condoms with their spouses if they assume monogamy. Sex with partners who use injection drugs (especially women who have sex with male IDUs) or who are HIV-positive similarly increases risk. The San Francisco-based AIDS in Multi-Ethnic Neighborhoods (AMEN)

study found that "White women, compared to all other groups, were more likely to report having had a sexual partner who used injection drugs in the last year, ever having a sex partner who was HIV-positive ... and knowing that they had a bisexual male partner" (Peterson et al., 1992). (HIV Prevention Planning Council, 1997, pp. 342-344)

## LACK OF ACCESS CO-FACTORS

### KNOWLEDGE OF SERVICES

A lack of knowledge about prevention services and their availability is clearly a barrier to obtaining accurate information about HIV. Some populations may require very specific efforts in order to become more aware of the prevention services available, and the services themselves may have to be carefully designed to reach the population. Language, culture (or acculturation), and literacy are often important factors that limit knowledge of services, but other factors, both personal and institutional, may play a critical role. Barriers to learning more about prevention services include fear of stigmatization; fear of anonymity or confidentiality being violated; official policies of schools, mental health facilities, prisons, and other institutions that may limit access to services; inability of severely mentally ill individuals to understand more about prevention services; and distrust of the service system. These barriers may be most significant for immigrants, communities in which stigma against homosexuality exists, isolated or hard-to-reach populations (e.g., the homeless, the impoverished, youth, the institutionalized, the differently abled), populations that experience discrimination (e.g., transgender communities), and groups with language or literacy barriers (discussed below). Asian/Pacific Islander men and women living in San Francisco may be particularly affected by many of these issues. (HIV Prevention Planning Council, 1997, pp. 345-346)



## LANGUAGE BARRIERS AND LOW LITERACY

These issues can be multi-faceted and complex. People whose first language is not English face barriers when prevention is delivered only in English; some people speak but do not read or write English, and some people do not read or write in any language. There has been much discussion about how to make HIV prevention services culturally and linguistically appropriate and relevant. Issues related to language and literacy that affect if and how HIV prevention messages are understood and accepted include (1) the cultural context in which messages are understood; (2) the perceptions of the target population about the relevance of the message (e.g., in disenfranchised and impoverished communities, HIV may not be the primary concern, and thus it may be important to connect HIV with other issues relevant to the community); (3) the target population's perception of the intent of the message sender; (4) the value and associations that the target population places on particular risk behaviors; (5) the use of colloquial rather than medical or technical vocabulary in both verbal and written communications; (6) vocabulary level of the message; and (7) layout and visual aspects of printed materials. In addition, prevention education and services must be available in the language of the recipient in order to be understood. Further, language and literacy issues have been linked to other co-factors, such as self-esteem. These issues affect both immigrants and U.S.-born individuals and are particularly salient for visually and hearing impaired people. In general, language barriers are a more significant issue for adult immigrants over 18 than for children or adolescents, who are more likely to speak English. (HIV Prevention Planning Council, 1997, pp. 347-350)

## UNINSURED/UNDERINSURED

Although no studies have documented a link between being uninsured or underinsured and

HIV risk, many people affected by HIV have issues related to poverty, employment, and immigration status that affect insurance status, which in turn can affect access to the health care system. For example, among HIV-positive individuals, being uninsured compared with having government-sponsored insurance (e.g., Medicaid or Veterans Administration) has been linked to lower perceived access to the health care system (Cunningham et al., 1995), and Medicaid-insured HIV patients in one study had less access to AIDS medications than privately insured individuals (Conviser et al., 2000). Another study showed that people living with HIV were less likely to be insured than those with an AIDS diagnosis (Diaz et al., 1994). These findings may have implications for prevention targeting HIV-positive individuals, as access to the health care system may affect their access to prevention education and materials. However, there is no evidence that being uninsured or underinsured is directly linked to increased HIV risk or access to prevention. One study among African American women showed that type of insurance was not associated with whether the women had accessed prevention services in the form of an HIV test, although associations with level or amount of insurance were not explored (Battle et al., 1996).

## IMMIGRATION STATUS

There are several issues related to immigration that could affect HIV risk, although no studies were found that have examined the relationship of immigration status (i.e., legal or illegal) and HIV risk. California public policy and public sentiment in the last two decades has not been supportive of health promotion or equal rights for immigrants. For example, Proposition 187 (<http://www.igc.org/cf/about187.html>) passed by California voters in 1994, but not yet implemented due to questions of constitutionality, barred undocumented immigrants from receiving (1) public social services, including mental health services and rape crisis intervention, (2) public health services, except for events defined

as emergencies under federal law, and (3) public education at elementary, secondary, and post-secondary level. It also required public employees to report suspected illegal immigrants to the INS. Further, until 1990 homosexuals were not permitted to immigrate to the U.S. (Shoop, 1993). Because of these policies, a justified fear of being identified as an undocumented immigrant likely has a substantial effect on access to health care and social services, including HIV prevention, for this population.

### **ACCESS TO SUBSTANCE ABUSE AND MENTAL HEALTH TREATMENT ON DEMAND**

In the past decade, San Francisco has demonstrated a commitment to treatment on demand for substance abuse that has resulted in decreased drug-related emergency room visits (<http://www.dph.sf.ca.us/press/pr020900.htm>). Further, according to a joint policy of San Francisco Mental Health Plan (SFMHP) and Community Substance Abuse Services (CSAS) (<http://www.dph.sf.ca.us/MentHlth/CMHS/PolProcMnl/3.04-6.htm>) addressing dually diagnosed individuals, no one shall be denied mental health services because of substance use, and no one shall be denied substance abuse services because of mental health issues. Despite progress in improving access, treatment on demand for substance abuse and mental health issues is not available for every individual who wants it. Given what is known about the effects of substance use and mental health problems on HIV risk (discussed earlier in this section), lack of access to these services could exacerbate and prolong this risk.

## **SOCIAL/SITUATIONAL CO-FACTORS**

### **INCARCERATION**

Incarceration and other forms of institutionalized living create unique conditions that may increase HIV risk. Some of the same issues apply to other forms of institutionalization, such as residential drug or psychiatric treatment, although they are not specifically addressed. Several studies in various cities including San Francisco have shown that HIV seropositivity rates for incarcerated men and women are high, sometimes higher than those for the general population. These high rates among people entering the criminal justice system could lead to infection of others who are incarcerated, through unsafe sexual and injection drug use practices. This risk may be exacerbated by restricted mobility within an institution and frequent transience between institutions, which creates a closed pool of infection for those within the system. Further, many people involved in the criminal justice system are incarcerated more than once and therefore periodically re-enter the community. In this manner, the otherwise closed pool of infection within the system may open to those in outside communities.

HIV risk among incarcerated populations is related to injection and non-injection drug use both before and while they are in prison. While in prison, it is difficult for prisoners who inject drugs to use clean needles consistently. Sexual activity in prisons is also a contributing factor, and the restriction of sexual activity to other inmates contributes to situational homosexuality. Further, condom availability in prison systems is a concern, although the San Francisco correctional system has been a leader in this respect. Rape in prison settings also occurs and thus the risks associated with rape apply. Finally, few effective HIV/AIDS prevention programs for inmates exist, contributing to the likelihood that this population remains involved in high-risk behaviors. San Francisco parolees and

inmates are primarily male, and people of color are disproportionately represented among the prison population compared with their representation in the general San Francisco population. Youth also live in institutional settings, such as San Francisco's Youth Guidance Center and the Juvenile Probation Department. (HIV Prevention Planning Council, 1997, pp. 351-354)

## LOW PERCEPTION OF RISK

Individuals' attitudes and values are shaped by their culture and society. Some of these attitudes and values may influence actions that can place people at increased risk for HIV. Perception of risk for HIV infection is a necessary precursor for risk reduction behaviors, and low perception of risk is correlated with involvement in high-risk behaviors. Many studies and reports indicate that members of communities of color perceive their risk of HIV infection to be low. Some possible reasons are that HIV/AIDS may be perceived as a disease of gay White men, AIDS cases among some groups may be underreported, and HIV risk may seem low when compared to other, more immediate issues or risks. Further, a lower level of acculturation among immigrant populations may be associated with a lower perceived risk, regardless of whether their actual risk is uniformly lower. Low perception of risk can affect any population or subpopulation, but Native Americans, Asians/Pacific Islanders, Latino/Latinas, and African Americans, and especially women in these groups, are thought to be particularly affected by this co-factor. (HIV Prevention Planning Council, 1997, pp. 354-356)

## DISCRIMINATION

Discrimination, or stigmatization, refers to socially defined patterns of prejudice and rejection. Discrimination can manifest in many ways, including exclusionary laws, attitudes or public opinions, and violence. In the U.S., dis-

crimination particularly occurs along lines of race/ethnicity, gender, gender identity, sexual orientation, age, and physical and mental ability. Although the effects of discrimination on HIV risk have not been studied, some possible associations are outlined here. Some forms of discrimination that may affect HIV risk include racism (HIV Prevention Planning Council, 1997, pp. 356-358), homophobia (HIV Prevention Planning Council, 1997, pp. 358-359), biphobia (HIV Prevention Planning Council, 1997, pp. 360-361), transphobia/gender identity-based discrimination (HIV Prevention Planning Council, 1997, pp. 360-361), sexism (HIV Prevention Planning Council, 1997, pp. 361-363), ageism (HIV Prevention Planning Council, 1997, p. 363), ableism (HIV Prevention Planning Council, 1997, p. 364), and discrimination against substance users (HIV Prevention Planning Council, 1997, pp. 364-365).

Discrimination can affect people at a societal level, through economic and social policies that contribute to poverty, violation of civil rights, lack of access to services, inadequate allocation of resources to health and social services (especially those that are incorrectly viewed as promoting substance use behaviors, such as needle exchange), and lack of culturally appropriate services that address the specific and unique needs of different groups.

Discrimination affects people at the individual and interpersonal levels as well. For example, stereotypes and ignorance may lead to persecution and can create barriers to obtaining regular employment (which may lead to practicing survival sex). Discrimination can increase stressors or social isolation that could lead to risk-taking behavior and can impact self-esteem, making the practice of safer sex difficult. It may also lead to power imbalances in sexual situations, making negotiation of safer sex difficult. Discrimination does not occur in discrete categories, and people who are members of more than one of the groups that traditionally experience discrimination face a "multiplier effect." For example, African American women struggle with the double burden of racism and sexism,

and a young gay Asian man grapples with racism, homophobia, and ageism. The multiplier effect requires HIV prevention services that are designed with the larger social context of

people's lives in mind. (HIV Prevention Planning Council, 1997, pp. 356-366)



# Appendix I: STRENGTHS AND LIMITATIONS OF DATA USED IN THE EPIDEMIOLOGIC PROFILE

## INFORMATION ABOUT AIDS

### AIDS CASE REGISTRY DATA

- **Strengths.** The most comprehensive source of information about past HIV infection; it includes most cases.
- **Limitations.** Due to the long incubation period of HIV disease, AIDS case data reflect infections of many years past. The categories used for reporting purposes may result in underreporting of certain populations, or no reporting for certain populations (such as the homeless). The categories used for reporting purposes were established by the CDC and are based on transmission risk groups, rather than the BRPs used by the HPPC. The AIDS case definition was changed in 1993 to include diagnostic conditions experienced more often by women and a CD4 count-based criterion. These changes make subsequent AIDS case trends difficult to compare to pre-1993 trends, but give a more accurate picture of the epidemic.

### INFORMATION ABOUT HIV

#### Prevalence Studies

- **Strengths.** Information from prevalence studies provides more current rates of infection than AIDS case data, since the studies test for HIV infection.
- **Limitations.** These studies are costly to conduct; therefore, they can be conducted only with a few groups. While prevalence studies provide the percentage of HIV-positive individuals in the studied population, they cannot accurately reflect the number of new

infections in a given time period. For example, much of the HIV prevalence found among older men gay men reflects infection that occurred in the 1980s.

#### Incidence Studies

Below are descriptions of three research methods used to access HIV incidence rates.

- **Longitudinal cohort studies.** Longitudinal cohort studies are the most traditional method for estimating HIV incidence. The design of the study is to recruit a large number of HIV-negative persons and repeatedly test them for HIV antibody over time (e.g., every six months or every 12 months). HIV incidence is calculated as the number of persons who seroconvert during the year divided by the number of subjects followed for the year who were HIV negative at the beginning of the year. When follow-up periods for individual subjects differ (e.g., some are seen at six months, some are seen at 12 months) incidence is calculated as an "incidence density" where each subject contributes the fraction of the year they were followed to the denominator. Key potential biases of longitudinal cohort studies include selection bias (that persons who wish to be in a study differ from those who do not), loss to follow-up (those who completed the study are different than those who did not), and an intervention effect (those participating in the study receive substantial prevention education compared to those not in the study).
- **Record-based studies.** HIV incidence can be calculated by examining the clinic records of persons who are repeatedly tested for HIV in the course of their clinical care or in the context of voluntary counseling and testing programs. The estimate is expressed

as an Incidence density where seroconversions are persons with a documented HIV-negative test followed by an HIV-positive test. The denominator is the sum of the time between tests. Key potential biases include selection bias (clinic participants or persons seeking HIV testing differ from persons who do not), loss to follow-up (clients do not return for repeat testing), and an intervention effect (persons repeatedly counseled may have a lower incidence of HIV compared to those not counseled or counseled only once).

- **Serological Testing Algorithm for Recent HIV Seroconversion (STARHS or the detuned ELISA).** STARHS identifies recent HIV seroconversion using two ELISAs, one sensitive to low levels of antibody and one less sensitive. Based on the slow increase in antibody during early infection, the algorithm distinguishes between people who have recently seroconverted (within the last 129 days on average) and persons with longstanding infection (on average greater than 129 days since seroconversion). Incidence is calculated as the number of recent seroconversions divided by the number of persons "susceptible" (persons HIV-negative before the last 129 days). The figure is annualized as percent per year:  $365/129 \times 100\%$ . Potential biases and limitations include "false" recent infections among persons on HAART or in late stage AIDS, vulnerability to variability in testing procedures, and the large sample size required for a precise margin of error.
- **Strengths.** Incidence studies provide information about the number of new infections. They are the best source of information with which to understand the current epidemic and to predict trends. Another strength is that, in the course of conducting incidence studies, researchers gather prevalence data as well.
- **Limitations.** These studies are very expensive and methodologically very difficult to

conduct, even more so than prevalence studies. Therefore, they can be conducted only for small pockets of the populations where prevalence rates are known to be high.

### Sentinel Surveillance

- **Strengths.** As with other HIV prevalence studies, sentinel serosurveys reflect more recent infections than do AIDS case registry data. Because they are repeated annually for several years, they are representative of the populations who access these sites.
- **Limitations.** These studies are conducted only among small pockets of the populations at the sentinel sites; thus, the information is not generalizable to populations who do not access the sentinel sites.

### Counseling and Testing Data

- **Strengths.** As with all HIV data, counseling and testing data reflect more recent infections than AIDS case data.
- **Limitations.** Unlike prevalence or sentinel studies, counseling and testing data contain a strong selection bias. Because these data are reported by over 100 sites in San Francisco, collection and reporting standards vary. Due to present discrepancies in reporting these data in 1994 through 1996, this information is not included in this year's Epidemiologic Profile; however, some counseling and testing data were considered during the 2001 Consensus Meeting to arrive at HIV incidence and prevalence estimates.

### 2001 Consensus Report

- **Strengths.** The Consensus Report summarizes the most current research (as of 2000) in a format that can inform planning and policy decisions. It provides estimates of both HIV incidence and prevalence for the HPPC BRPs.

- **Limitations.** It is based on expert opinions of various studies that have different target populations and methods. The estimates are only an approximation of true incidence and prevalence, and many assumptions are made when calculating these estimates. Different amounts of information are available depending on the BRP; therefore, some estimates are based on greater, more detailed information than others (e.g., MSM data are more comprehensive and varied than data on transgendered persons).

## INFORMATION ABOUT RISK FOR HIV INFECTION

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### Behavioral Studies

- **Strengths.** Can be conducted on most populations, indicates who potentially may contract HIV, important for prevention planning and evaluating interventions. Behavioral studies generally are less expensive to conduct than prevalence or incidence studies.
- **Limitations.** Studies vary in quality, comprehensiveness, and types of behaviors measured. They are conducted among populations selected by the researchers, who often rely on convenience sampling. The studies do not always match the BRPs used by the HPPC for planning and priority-setting and are not always generalizable or representative. Differences in measures and methods of the risk behavior make it difficult to summarize results across studies.

## INDIRECT INDICATORS OF RISK

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### Surrogate Markers

- **Strengths.** These markers indicate who may be at risk. Some surrogate markers (i.e., STDs) indicate direct (biological) risk and

others indicate indirect (behavioral) risk.

- **Limitations.** Are not always specific to HIV. Some are better indicators of risk than others.

### Co-factors

- **Strengths.** Co-factors provide additional information about the increased psychosocial risk that various groups face. While behavior determines risk, psychosocial factors often influence behavior and thus are vital to a deeper understanding of HIV risk.
- **Limitations.** Co-factors do not provide information about the direct risk of HIV. Some co-factors seem to play a more important role in predicting risk for HIV, while others have only a tangential role. Studies that include measures of co-factors are difficult to compare across populations, and an accurate sense of the actual importance of a co-factor is impossible to gain, especially across population groups.

## INFORMATION ABOUT SIZE AND CHARACTERISTICS OF THE POPULATION

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### Census Information

- **Strengths.** The census is conducted throughout San Francisco. It gives estimates of population size and basic demographic characteristics. It is the most commonly cited source of information about the size and demographic characteristics of the population.
- **Limitations.** The census is conducted only every ten years. It does not collect information about many important characteristics (e.g., sexual orientation). It does not adequately capture information about populations without a permanent residence.

## Population Size Estimates

- **Strengths.** Estimates of population size are useful in conjunction with epidemiologic information for prevention planning and priority-setting, and can make comparisons between groups possible.
- **Limitations.** Estimates of the size of these groups are based on census data (see limita-

tions of census data), and several assumptions (which may or may not be true) are made when determining estimates (particularly for populations based on sexual and drug-using behaviors). Some estimates, such as the estimated size of the gay/bisexual male population, were based on outdated population surveys.



## Appendix 2: CUMULATIVE AIDS CASES

Since 1980, there have been a total of 27,332 AIDS cases reported in San Francisco, with approximately 96% among males, 4% among females, and 1% among transgendered individuals (although data on transgendered AIDS cases has only been collected since 1996). Exhibit 2-1 shows cumulative AIDS cases in San Francisco by transmission category and race/ethnicity.

<b>EXHIBIT 2-1. CUMULATIVE AIDS CASES BY BRP AND RACE/ETHNICITY, SAN FRANCISCO, 1980-2000</b>												
	White		African American		Latino		Asian/Pacific Islander		Native American		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Gay/bisexual male	16,727	82.5	1,567	47.7	2,159	74.9	593	76.7	65	51.2	21,111	77.2
IDU	648	3.2	922	28.14	226	7.8	38	4.9	19	15.0	1,853	6.8
Gay/bisexual male IDU	2,503	12.4	545	16.6	323	11.2	49	6.3	38	29.9	3,458	12.7
Lesbian/bisexual female	19	0.1	12	0.4	4	0.1	2	0.3	1	0.8	38	0.1
Heterosexual male and female	141	0.7	128	3.9	68	2.4	32	4.1	1	0.8	370	1.4
Blood products recipient	111	0.5	31	1.6	32	1.1	31	4.0	0	0.0	205	0.8
Hemophiliac	27	0.1	2	0.1	9	0.3	7	0.9	0	0.0	45	0.2
Pediatric	18	0.1	22	0.7	13	0.5	7	0.9	1	0.8	61	0.2
None of the above/Other	72	0.4	53	1.6	50	1.7	14	1.8	2	1.6	191	0.7
<b>Total</b>	<b>20,266</b>	<b>100.0</b>	<b>3,282</b>	<b>100.0</b>	<b>2,884</b>	<b>100.0</b>	<b>773</b>	<b>100.0</b>	<b>127</b>	<b>100.0</b>	<b>27,332</b>	<b>100.0</b>

Source: San Francisco Department of Public Health. Quarterly AIDS Surveillance Report. AIDS Cases Reported through December 2000.

## Appendix 3: BIBLIOGRAPHY OF BEHAVIORAL STUDIES FOR SAN FRANCISCO POPULATIONS, 1997-2001

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## Chapter 4

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# SETTING PRIORITIES FOR HIV PREVENTION



## CHAPTER OVERVIEW

**Section I: History of the Model** reviews the history behind the development of the priority-setting process since the inception of community planning in San Francisco.

**Section II: Priority-Setting 1999-2000** reviews the revised priority-setting model and the process used to develop it.

## Section I: HISTORY OF THE MODEL

The priority-setting model was developed during the first two years of community planning. The unique characteristic of San Francisco's model was its departure from the use of traditional "risk groups" as a way to define populations at significant risk of contracting HIV, and instead behavioral risk populations (BRPs) were introduced. This shifted the focus from an individual's identity to their sexual and drug use behaviors. Members of the first HPPC were committed to developing a model that had a basis in science and effectively used multiple data sources, such as incidence and prevalence studies and behavioral research. In 1998, the

Council voted to make some revisions to the model, and these became the tasks for the HPPC Priority-Setting Committee in 1999-2000:

- Reduce the number of BRPs, for example, to reflect the data collection categories used by researchers, to group BRPs with similar behavioral risks (e.g., MSM and MSM/F), and to more effectively integrate transgendered populations into the model.
- Prioritize BRPs by HIV incidence number.
- Identify high-risk subpopulations within BRPs that should be ensured funding.
- Develop resource allocation recommendations.

## Section II: PRIORITY-SETTING 1999-2000

Exhibit 1 outlines the complete revised HPPC Priority-Setting Model (1999-2000). The remainder of this section describes the work done over

the course of two years to develop this revised model.

### EXHIBIT 1. 1999-2000 PRIORITY-SETTING MODEL

Prioritize the eight BRPs by HIV incidence number (i.e., estimated number of new infections).

Identify subpopulations within each BRP to be ensured funding using HIV seroprevalence of 8% or higher.

Identify populations with emerging incidence or prevalence using behavioral and other data from researchers, providers, and community members.

Develop guidelines for allocating resources based on information from the other parts of the model.

## REVISION OF THE BEHAVIORAL RISK POPULATIONS

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In the first year of HIV prevention community planning, the HPPC developed the paradigm of 12 BRPs (Appendix 1). In 1999 and 2000, the HPPC Priority-Setting Task Force and the Priority Setting Committee began discussions on the limitations of the current 12-BRP model, its efficiency as a tool for priority-setting, and its full representation of all groups at risk in San Francisco. Two problems with the model were identified and are described here.

### **Issue 1: Transgendered populations were not effectively integrated into the model.**

Some committee members felt that, in its revised form, the BRP matrix did not address or acknowledge the unique risks of transgendered persons. There was a concern that grouping transgendered persons with other risk populations did not separate them into a distinct population, thereby diluting their risk factors. Consideration was also given to the fact that in many instances, MTF are typically classified as MSM by prevention and direct care providers and in surveillance, giving a false impression of the size of the population and the risks associated with being transgendered.

To address these concerns, in 1999, the HIV Prevention Section asked the Transgender Working Group (a non-HPPC group of individuals from the transgender community convened to develop a network of HIV prevention activities for transgendered populations) to consider how transgendered persons were represented in the model. The Priority-Setting Committee considered the recommendations of the Working

Group, and after thoughtful deliberation, decided on the addition of two new BRPs that would exclusively address the sexual and injection drug use behaviors of transgendered individuals. The Committee also accepted suggestions regarding distinctions between MTF and FTM transgendered people. In 2000, the Committee deliberated on how to incorporate other risk populations, such as men who have sex with transgendered persons (MST), and again revised the BRPs. The final BRP matrix, including the subpopulations identified, is detailed in Exhibit 4.

### **Issue 2: Incidence data were not available for all BRPs, and these data were needed in order to meet the requirements of the revised priority-setting model.**

In 1998, the HPPC voted to rank BRPs by incidence number (i.e., estimated number of new infections). However, the model as constructed did not easily lend itself to available prevalence and incidence data. Research studies have not shifted to sampling populations in the BRP paradigm established by the first HPPC in 1994, making it difficult to maximize the model in terms of priority ranking with incidence data. A decision was made to modify the model to be more in line with the way data were collected by researchers, in order to make it not only more useful, but able to accommodate the revised criteria for ranking set forth by the HPPC.

The revised priority-setting model, which incorporates the recommendations of the Transgender Working Group, the 1999 Priority-Setting Task Force, and the 2000 Priority-Setting Committee, and its relationship to the original BRP matrix, is presented in Exhibit 2.



<b>EXHIBIT 2: REVISED BRP MATRIX AND RELATIONSHIP TO 1998 MODEL</b>	
<b>New BRP</b>	<b><i>Includes the Following BRPs from 1998</i></b>
<b>MSM, MSM/F</b> <ul style="list-style-type: none"> <li>• Males who have sex with Males</li> <li>• Males who have sex with Males and Females</li> </ul>	3. MSM 4. MSM/F
<b>TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, FST/F</b> <ul style="list-style-type: none"> <li>• Transgendered persons who have sex with Males</li> <li>• Transgendered persons who have sex with Males/Females</li> <li>• Transgendered persons who have sex with Females</li> <li>• Transgendered persons who have sex with Transgendered persons</li> <li>• Transgendered persons who have sex with Males/Transgendered persons</li> <li>• Transgendered persons who have sex with Females/Transgendered persons</li> <li>• Males who have sex with Transgendered persons</li> <li>• Males who have sex with Transgendered persons/Males</li> <li>• Males who have sex with Transgendered persons/Females</li> <li>• Females who have sex with Transgendered persons</li> <li>• Females who have sex with Transgendered persons/Males</li> <li>• Females who have sex with Transgendered persons/Females</li> </ul>	3. MSM 4. MSM/F 9. FSM/F 10. FSM
<b>MSM-IDU, MSM/F-IDU</b> <ul style="list-style-type: none"> <li>• Males who have sex with Males and Inject Drugs</li> <li>• Males who have sex with Males and Females and Inject Drugs</li> </ul>	1. MSM-IDU 2. MSM/F-IDU
<b>FSM-IDU, FSM/F-IDU, FSF-IDU</b> <ul style="list-style-type: none"> <li>• Females who have sex with Males and Inject Drugs</li> <li>• Females who have sex with Males and Females and Inject Drugs</li> <li>• Females who have sex with Females and Inject Drugs</li> </ul>	5. FSM-IDU 7. FSM/F-IDU 8. FSF-IDU
<b>MSF-IDU</b> <ul style="list-style-type: none"> <li>• Males who have sex with Females and Inject Drugs</li> </ul>	6. MSF-IDU
<b>TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F-IDU, FST-IDU, FST/M-IDU, FST/F-IDU</b> <ul style="list-style-type: none"> <li>• Transgendered persons who have sex with Males and Inject Drugs</li> <li>• Transgendered persons who have sex with Males/Females and Inject Drugs</li> <li>• Transgendered persons who have sex with Females and Inject Drugs</li> <li>• Transgendered persons who have sex with Transgendered persons</li> <li>• Transgendered persons who have sex with Males/Transgendered persons and Inject Drugs</li> <li>• Transgendered persons who have sex with Females/Transgendered persons and Inject Drugs</li> <li>• Males who have sex with Transgendered persons and Inject Drugs</li> <li>• Males who have sex with Transgendered persons/Males and Inject Drugs</li> <li>• Males who have sex with Transgendered persons/Females and Inject Drugs</li> <li>• Females who have sex with Transgendered persons and Inject Drugs</li> <li>• Females who have sex with Transgendered persons/Males and Inject Drugs</li> <li>• Females who have sex with Transgendered persons/Females and Inject Drugs</li> </ul>	1. MSM-IDU 2. MSM/F-IDU 5. FSM-IDU 6. MSF-IDU 7. FSM/F-IDU

**EXHIBIT 2 (CONT'D): REVISED BRP MATRIX AND  
RELATIONSHIP TO 1998 MODEL**

<i>New BRP</i>	<i>Includes the Following BRPs from 1998</i>
<b>FSM, FSM/F, FSF</b> <ul style="list-style-type: none"> <li>Females who have sex with Males</li> <li>Females who have sex with Males and Females</li> <li>Females who have sex with Females</li> </ul>	9. FSM/F 10. FSM 12. FSF
<b>MSF</b> <ul style="list-style-type: none"> <li>Males who have sex with Females</li> </ul>	11. MSF

### **PRIORITIZATION OF THE BEHAVIORAL RISK POPULATIONS USING HIV INCIDENCE DATA**

The next task for the priority-setting groups was to rank the collapsed and revised BRP matrix using HIV incidence data. Specifically, the number/percent of total new infections was approved by the HPPC in 1998 as the criteria for

ranking the BRP matrix. HIV incidence data is difficult to obtain, since HIV reporting is not mandatory in the state of California. Therefore, the BRPs were ranked using the estimates of number of new infections in 2001 developed at the 2001 HIV Consensus Meeting, which were based on findings from local research and surveillance efforts (Exhibit 3). A description of the consensus process is contained in the Epidemiologic Profile (p. 61). The final Consensus Report containing all the data sources used to derive the estimate can be found at <http://www.dph.sf.ca.us/>.

**EXHIBIT 3. BRPs RANKED BY NUMBER/PERCENT OF TOTAL NEW INFECTIONS**

<i>BRP</i>	<i>Total Population Size</i>	<i>Estimated HIV- negative: n (%)</i>	<i>Estimated HIV- positive: n (%)</i>	<i>Estimated New Infections 1/01/01- 12/31/01</i>	<i>Percent of Total Estimated Number of New Infections</i>	<i>Incidence: % per year</i>
<b>1. MSM, MSM/F</b>	46,800	34,014 (72.7%)	12,786 (27.3%)	748	69.1%	2.2%
<b>2. TSM, TSM/F, TSF, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, FST/F*</b>	2,160	1,647 (76.3%)	513 (23.8%)	102	9.4%	6.2%
<b>3. MSM-IDU, MSM/F- IDU</b>	3,982	1,902 (47.8%)	2,080 (52.2%)	87	8.0%	4.6%
<b>4. FSM-IDU, FSM/F- IDU, FSF-IDU</b>	4,850	4,365 (90.0%)	485 (10.0%)	48	4.4%	1.1%
<b>5. MSF-IDU</b>	9,000	8,100 (90.0%)	900 (10.0%)	45	4.2%	0.6%
<b>6. TSM-IDU, TSM/F- IDU, TSF-IDU, TST- IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F- IDU, FST-IDU, FST/M- IDU, FST/F-IDU*</b>	840	303 (36.1%)	537 (63.9%)	40	3.7%	13.2%
<b>7. FSM, FSM/F, FSF</b>	5,334**	-	334 (0.1% of total popula- tion)	10	0.9%	<0.1%
<b>8. MSF</b>	2,082**	-	82 (<0.1% of total popula- tion)	2	0.2%	<0.1%
<b>Totals</b>	-	-	-	1,082	100.0%	-

\*Consensus estimates include only MTF transgendered persons, and not males or females who have sex with transgendered individuals.

\*\*This is the number considered to be at risk within these BRPs, not the total population size.

## IDENTIFICATION OF SUBPOPULATIONS

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### IDENTIFICATION OF SUBPOPULATIONS

The Council's inclusion of subpopulations into the priority-setting model represents recognition that certain subpopulations are disproportionately impacted by HIV and/or require more effort to be reached effectively because of a high level of co-factors. Therefore, the subpopulations identified are ensured to receive funding. The first step in the process of identifying subpopulations within the BRP matrix was to establish criteria that could be used to ensure that the selection of populations was unbiased and evidence-based. It was decided that subpopulations would be identified using prevalence data, and that any population with a prevalence of approximately four times that of the city as a whole (which is 2.3%) would be classified as a priority subpopulation, making the criteria for inclusion in the model 8%.

The Priority-Setting Committee decided to establish a process and criteria for identifying prevalence studies that would be used for identifying subpopulations in the model:

- Studies were divided into two groups, those with prevalence rates and those with only behavioral, STD, and/or HIV testing data.
- All studies were then scored on quality of the sample, precision (i.e., sample size), and timeliness (i.e., how recently the last participant was recruited) and grouped according to total score.
- Prevalence rates and subpopulations were drawn from those studies in the group with the highest scores.
- Studies without prevalence data but that included other surrogate markers, such as risk behaviors and STD data, were categorized in a similar way and provided the beginnings of a list of emerging populations.

Exhibit 4 lists all BRPs in the revised matrix, with subpopulations identified using selected prevalence data.



<b>EXHIBIT 4. SUBPOPULATIONS FOR EACH BRP</b>		
<i>Behavioral Risk Population</i>	<i>Subpopulations</i>	
	<i>Race/Ethnicity</i>	<i>Other Factor(s)</i>
<b>1. MSM, MSM/F</b>	African American*:	All age groups
	Asian/Pacific Islander:	All age groups
	Latino*:	All age groups
	Native American:	All age groups
	White*:	All age groups
	All:	Homeless/ marginally housed youth and adults
	All:	Incarcerated
<b>2. TSM, TSM/F, TSF, TST, TSM/T, TSF/T</b>	African American:	All MTF
	Asian/Pacific Islander:	All MTF
	Latina:	All MTF
	Native American:	All MTF
	White:	All MTF
<b>MST, MST/M, MST/F, FST, FST/M, FST/F</b>	No subpopulations identified	
<b>3. MSM-IDU, MSM/F-IDU</b>	African American*:	All age groups
	Asian/Pacific Islander:	All age groups
	Latino*:	All age groups
	Native American:	All age groups
	White*:	All age groups
	All:	Homeless/ marginally housed youth and adults
	All:	Incarcerated
<b>4. FSM-IDU, FSM/F-IDU, FSF-IDU</b>	African American:	All age groups
	Latina:	All age groups
<b>5. MSF-IDU</b>	African American:	All age groups
	White:	All age groups
<b>6. TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU</b>	African American:	All MTF
	Asian/Pacific Islander:	All MTF
	Latina:	All MTF
	Native American:	All MTF
	White:	All MTF
<b>MST-IDU, MST/M-IDU, MST/F-IDU, FST-IDU, FST/M-IDU, FST/F-IDU</b>	No subpopulations identified	
<b>7. FSM, FSM/F, FSF</b>	No subpopulations identified	
<b>8. MSF</b>	No subpopulations identified	

\*People under 18 years old in these populations had an 8% or higher prevalence in one or more studies. The prioritization category "all age groups" encompasses these populations.

## IDENTIFICATION OF EMERGING POPULATIONS

Once subpopulations were identified using selected prevalence studies, emerging populations were to be identified. The Priority-Setting Committee defines emerging populations as those populations that do not have sufficient

prevalence data to be included in the model, but who, through other data sources such as STD rates, behavioral data, Behavioral Risk Assessment data, and anecdotal information from providers, are determined to be at significant risk for infection. STD data are particularly important for identifying populations that may be about to experience an increase in HIV

**EXHIBIT 5. RESOURCE ALLOCATION MODEL**

<b>Tier</b>	<b>BRPs</b>	<b>Estimated Percent of Total New Infections in 2001</b>	<b>Percent of Funding (Recommended Range)</b>
1	BRP 1: MSM, MSM/F BRP 2: TSM, TSM/F, TSE, TST, TSM/T, TSF/T, MST, MST/M, MST/F, FST, FST/M, FST/F	78.5%	73% - 81%
2	BRP 3: MSM-IDU, MSM/F-IDU BRP 4: FSM-IDU, FSF-IDU, FSF/M-IDU BRP 5: MSF-IDU BRP 6: TSM-IDU, TSM/F-IDU, TSF-IDU, TST-IDU, TSM/T-IDU, TSF/T-IDU, MST-IDU, MST/M-IDU, MST/F-IDU, FST-IDU, FST/M-IDU, FST/F-IDU	20.3%	18% - 22%
3	BRP 7: FSM, FSM/F, FSF BRP 8: MSF	1.1%	1% - 5% (most of the funding to FSM, FSM/F)

infections (e.g., increases in rectal gonorrhea among MSM). The process for identifying these populations was outlined in the following motion adopted by the Council:

*The Priority-Setting Committee and the HIV Prevention Section, in partnership with the HPPC, will convene a community forum(s) at which members of the community and providers that serve communities including but not limited to HIV/AIDS prevention and care, mental health, STDs, substance abuse treatment, family planning, housing, and shelters be invited to present agency-level data in order to highlight high-risk populations that did not emerge in the revised priority-setting model.*

Rapid assessments will be conducted with these populations to determine prevalence, risk behaviors, and methods for effective HIV prevention.

## RESOURCE ALLOCATION GUIDELINES

### GUIDELINES FOR BEHAVIORAL RISK POPULATIONS

For the purposes of resource allocation guidelines, the BRP model was separated into three tiers, with each tier corresponding to a range of new infections. The first tier of the resource allocation model includes BRPs 1 and 2, which have the highest number of estimated new infections. Tier 2 includes BRPs 3-6 and Tier 3 includes BRPs 7 and 8. The HPPC recommends that each tier be allocated a range of funding that corresponds to the estimated number of new infections for the BRPs contained in that particular tier, with the approximate midpoint of the funding range corresponding to the percent of all new infections (Exhibit 5). The HPPC recommends that FSM, FSM/F, FSF and MSF be allotted up to 5% up the funding, with most going to FSM and FSM/F. Although FSM and FSM/F represent only 1.1% of the new infections, a substantial baseline dollar amount is required in order to do meaningful prevention for a group. A recommended range of funding is given as opposed to an exact percent to accommodate the ranges in funding application amounts.

The final resource allocations guidelines approved by the Council are presented in Exhibit 5.

The Council also approved eleven points that are to be considered during the technical review of proposals and in final funding decisions made by the HIV Prevention Section. They are:

- Size of the target population should be considered in determining the amount of resources (i.e., high incidence in a small population does not require the same level of resources as high incidence in a large population).
- Consider the relative prevalence of infection already in that population (i.e., MSM-IDU and TSM-IDU have five and six times the prevalence of MSM-IDU and FSM-IDU).
- Consider the relative HIV incidence (percent and number) in each population.
- Funding decisions should consider disparities in race and socioeconomics of target populations.
- Access to services should be considered.
- Programs that target difficult to reach populations may cost more to implement than those targeting more visible and easily accessible communities.
- Whether a proposal is bidding for a continuing program or start-up program should be considered.
- Needle exchange programs should be funded at current levels in order to maintain the low incidence among injection drug users.
- Programs that have been effective should stay in place.
- The prevention needs of school-aged youth should be addressed.
- Resource allocation should include information about all sources of HIV prevention funding allocated for San Francisco and for all populations.

## GUIDELINES FOR HIV-POSITIVE POPULATIONS

The committee also considered how HIV-positive populations should be included in the resource allocations model. The committee discussed the issue and concluded that:

- If HIV-positive populations were included as a subpopulation of each BRP and thus were guaranteed funding, remaining funding (and therefore less funding) would then be allocated to HIV-negative populations. Therefore, it was decided to find another method of addressing the needs of HIV-positive populations.
- Since one of the HPPC's goals for HIV prevention over the next three years is to increase and improve prevention for positives, there should be some mechanism to ensure that resources are devoted to this goal. Therefore, the Council recommends that some amount be allocated. However, it is a policy decision of the HIV Prevention Section to determine the amount of funds allocated to HIV-positive populations (in addition to the current demonstration project).
- Should targeted funding for HIV-positive populations become available, the committee recommends that the funding be allocated in the proportions outlined in Exhibit 6.

### EXHIBIT 6. RESOURCE ALLOCATION MODEL FOR TARGETED FUNDING FOR HIV-POSITIVE POPULATIONS

<i>BRP (HIV-positive populations)</i>	<i>Percent of Funding</i>
Tier 1: BRPs 1 and 2	75%
Tier 2: BRPs 3 - 6	23%
Tier 3: BRPs 7 and 8	2%

The Committee also made the following recommendations for future consideration concerning the prevention needs of HIV-positive individuals:

- The HPPC Co-Chairs should work with the HIV Health Services Planning Council (HSPC, also known as the CARE Council) Co-Chairs to determine how to build capacity to integrate HIV prevention into CARE services.
- Work with the HSPC to include primary prevention in the standards of care for primary medical care.
- Capacity building for CARE-funded agencies to integrate HIV prevention counseling into health services should be considered.
- A better understanding of how to optimally provide HIV prevention to HIV-positive people should be explored: appropriate venues, appropriate messages, and appropriate time and place.
- Conduct focus groups and key informant interviews with HIV-positive persons (both recently infected and long-term) and providers of CARE services.



## Appendix I: 1998 BEHAVIORAL RISK POPULATIONS

<b>1998 BEHAVIORAL RISK POPULATIONS IN PRIORITIZED ORDER</b>		
<b><i>BRP #</i></b>		<b><i>Abbreviations</i></b>
1.	Males, transgendered male-to-female (pre-operative), and transgendered female-to-male (post-operative) who have sex with males and inject drugs.	<b>MSM-IDU</b>
2.	Males, transgendered male-to-female (pre-operative), and transgendered female-to-male (post-operative) who have sex with males and females and inject drugs.	<b>MSM/F-IDU</b>
3.	Males, transgendered male-to-female (pre-operative), and transgendered female-to-male (post-operative) who have sex with males.	<b>MSM</b>
4.	Males, transgendered male-to-female (pre-operative), and transgendered female-to-male (post-operative) who have sex with males and females.	<b>MSM/F</b>
5.	Females, transgendered female-to-male (pre-operative), and transgendered male-to-female (post-operative) who have sex with males and inject drugs.	<b>FSM-IDU</b>
6.	Males, transgendered male-to-female (pre-operative), and transgendered female-to-male (post-operative) who have sex with males and inject drugs.	<b>MSF-IDU</b>
7.	Females, transgendered female-to-male (pre-operative) and transgendered male-to-female (post-operative) who have sex with males and females and inject drugs.	<b>FSM/F-IDU</b>
8.	Females, transgendered female-to-male (pre-operative) and transgendered male-to-female (post-operative) who have sex with females and inject drugs.	<b>FSF-IDU</b>
9.	Females, transgendered female-to-male (pre-operative) and transgendered male-to-female (post-operative) who have sex with males and females.	<b>FSM/F</b>
10.	Females, transgendered female-to-male (pre-operative) and transgendered male-to-female (post-operative) who have sex with males.	<b>FSM</b>
11.	Males, transgendered male-to-female (pre-operative), and transgendered male-to-female (post-operative) who have sex with females.	<b>MSF</b>
12.	Females, transgendered female-to-male (pre-operative), and transgendered male-to-female (post-operative) who have sex with females.	<b>FSF</b>



## Chapter 5

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# STRATEGIES AND INTERVENTIONS: MAKING HIV PREVENTION WORK

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## CHAPTER OVERVIEW

**Section I: Introduction** provides recommendations and suggestions for program development and implementation and discusses the use of theories, strategies, and interventions in HIV prevention programs.

**Section II: Behavioral Theory** reviews the major tenets of the theories frequently used for HIV prevention and gives examples of their application in an HIV prevention setting.

**Section III: Strategies and Interventions** defines several approaches to HIV prevention, provides implementation recommendations, and describes strengths, limitations, and effectiveness for each.

## Section I: INTRODUCTION

### BACKGROUND

HIV prevention has seen many successes in San Francisco in recent decades, with new infections decreasing dramatically since the 1980s. Despite these successes, the 21st century brings with it many new challenges and opportunities for HIV prevention. One of the greatest challenges for the HIV prevention community is to shift toward an HIV prevention approach that addresses individuals' needs in the context of their own lives, with a focus on a broader set of issues. Despite the limits imposed by HIV prevention funding, those committed to preventing HIV transmission must find ways to create an integrated service system that links individuals to services such as substance abuse, mental health, and STD testing and treatment and to introduce effective prevention strategies, such as harm reduction, that are most feasible and responsive to the daily realities faced by those at risk for HIV. This chapter provides recommendations for the development of effective prevention programs; it is not a mandate for prevention planning or program design. Its purpose is to describe theories, strategies, and interventions that providers can use creatively, in different combinations, to meet the larger goal of establishing an integrated, coordinated, and responsive set of HIV prevention services for San Francisco's at-risk populations.

### GENERAL RECOMMENDATIONS

#### HOW TO DEVELOP A PROGRAM

**Step 1: Conduct a Needs Assessment.** A needs assessment for HIV prevention is the process of collecting and analyzing information to determine the educational and service needs of the target population. A needs assessment is the first step in designing an HIV prevention program. A needs assessment may solicit information about the HIV-related risk behaviors of the target population, their level of access to services, barriers to accessing services, and successful strategies and interventions for the target population. This information is then used to design programs that are appropriate and effective for the target population. A needs assessment may include primary data (e.g., interviews) and/or secondary data (e.g., literature review).

#### Needs Assessment Resources

##### CAPS Fact Sheets:

<http://www.caps.ucsf.edu/FSindex.html>

Chapter 2: Needs Assessment, Resource Inventory, and Gap Analysis

**Step 2: Design a Program.** According to CDC (Centers for Disease Control and Prevention,

1999), a strong program design includes the following elements:

- A clearly defined target population (e.g., defined by behavioral risk population, race/ethnicity, gender, age)
- Clearly defined overall goals and specific objectives
- Behavioral theory as its foundation
- A focus on reducing specific risk behaviors through practicing skills
- A realistic timeline for implementing activities and achieving objectives

#### **Program Planning and Design Resources**

##### Program Planning:

<http://hivinsite.ucsf.edu/InSite.jsp?page=pr-02-04>

STD/HIV Prevention Training Center (Berkeley, CA) provides training on use of theory and program design for HIV prevention. (510) 883-6600, <http://itsa.ucsf.edu/~bolan/std.htm>

##### Examples of Effective Interventions:

<http://www.cdc.gov/hiv/pubs/hivcompendium.pdf>

### **Step 3: Design a Program Evaluation.**

Program evaluation determines whether a program is being delivered as planned (process evaluation) and whether the program's objectives are being met (outcome evaluation). Evaluation tells providers whether and how their interventions and programs are working. Evaluation may also include assessing client satisfaction with services.

#### **Program Evaluation Resources**

<http://HIVinSite.ucsf.edu/InSite.jsp?page=pr-02-05>

Chapter 7: Strategic Evaluation

Evaluation section under each intervention in this chapter

## **OTHER RECOMMENDATIONS FOR PROGRAM DESIGN AND IMPLEMENTATION**

There are several components that should be a part of all HIV prevention programs.

**Behavior Change Counseling.** All individuals who use HIV prevention services should be offered the opportunity to participate in individualized behavior change counseling, either at the agency where they are receiving services or through referral.

**Community Involvement and Trust.** All prevention programs should strive to stimulate community involvement through cultivation of community trust over time. Therefore, staff and volunteers should be nonjudgmental, open, compassionate, trustworthy, and dedicated, as well as sensitive and responsive to community needs. Community members should be invited to participate in the development and implementation of programs when appropriate.

### **Cultural Competency and Appropriateness.**

Both the content and method of delivery of an intervention should be appropriate for the target population. This requires an understanding of, respect for, and attention to how people from a cultural group communicate and interact, as well as their values and beliefs. Examples include delivering interventions in the language the target population is most comfortable speaking and hiring members of the target population to deliver interventions when possible. Cultural competency can be defined in many ways and is not limited to race/ethnicity and language.

**Defining the Target Population.** In general, the more well-defined the target population the more effective and cost-effective programs are. Interventions that target the "general population" or other broadly defined groups are not as relevant in this era of HIV prevention in which there are generally high levels of knowledge and awareness about HIV/AIDS. Target popu-

lations can be defined by behavioral risk, gender, age, sexual orientation, ethnic or cultural identity, etc., or a combination of these factors. Defining the target population in this way allows providers to better assess the particular prevention needs of the group and design responsive programs.

**Harm Reduction.** A harm reduction approach acknowledges that people engage in unhealthy behaviors and seeks to reduce the harm that results from the behavior. For example, injection drug use is a behavior for which the potential for harmful effects can be reduced if the person does not share needles; therefore, an intervention that promotes the use of a new syringe for every injection is based on harm reduction principles. All strategies and interventions should contain harm reduction options for clients. (See Harm Reduction in the Strategies section of this chapter for further information.)

**Holistic Services.** HIV cannot be addressed in a vacuum; it must be addressed within the context of people's own lives. HIV prevention should be just one component of a set of services addressing multiple issues relevant to clients and community members. Social services to prioritize for coordination with prevention include, but are not limited to: substance abuse treatment, immigration services, legal services, general assistance, mental health and primary health care services, shelters for homeless, shelters for battered women and children, rape crisis counseling, child protective services, suicide prevention, job training and placement, youth and runaway services, family planning, STD care and prevention, and services for people with physical, emotional, and/or learning disabilities. (Refer to Chapter 9: Linkages and Coordination for additional issues.) Referrals are one mechanism to ensure that people receive needed services, and whoever delivers an intervention should be trained in community resources and referral mechanisms. The development of coordinated and comprehensive services should consider both individual needs (i.e., linking individuals with needed services) and community needs (i.e., linking under-

served communities with the service system).

**Individual Skills Building.** The intent of prevention interventions is to effect changes in behaviors that put people at risk for HIV. Providing information and education is only the first step in HIV prevention. Building skills through role-playing and other interactive exercises and creating social norms for adopting healthy behaviors are critical when focusing on behavior change.

**Multiple Approaches.** HIV prevention strategies and interventions are more likely to reach target populations if a variety of approaches are used. The most successful prevention programs use a combination of theories, strategies, and interventions linked together to create one cohesive program. Providers may achieve this goal within their own programs or collaborate with other agencies that serve the same target population. In addition, the use of multiple communication methods and the design of consistent messages that address the issue from more than one perspective are likely to contribute to the effectiveness of programs.

**Prevention Messages.** The content of interventions should be dictated by findings from a needs assessment, either formal or informal, and should address issues that are current and relevant for the target population. For example, in 2001, a needs assessment might reveal that a belief that highly active antiretroviral therapy (HAART) decreases infectiousness is leading to increased unsafe sex in a particular population; therefore, an intervention for this population would disseminate prevention messages that focus on this issue. In addition, prevention messages should be concise, appropriate to the target population, and delivered with frequency over an extended period of time for maximum effect. (However, attention to "saturation" is important; needs assessments can help determine when it is time to change a prevention message or give it "a new look.") It is important that messages speak to the whole person and her/his complex realm of interests, needs, and concerns, instead of focusing only on HIV.



**Recruitment and Retention.** Recruitment and retention of participants in HIV prevention programs can be challenging. Providing incentives such as food, food vouchers, transportation tokens, t-shirts, or condoms, can be useful for some target populations. Likewise, attention to recruitment and retention of staff and volunteers is critical for the continuity of programs, which contributes to agency credibility and helps promote community trust.

**Risk Reduction.** HIV prevention efforts should aim to reduce people's risk, and not necessarily eliminate risk altogether. For example, the goal of increasing condom use is more realistic than expecting a person to become abstinent.

**Special Needs.** Some target populations, or subgroups within a population, can be very difficult to access. Providers should use creative means to reach these groups. Groups that often get missed with conventional HIV prevention efforts include people who are visually or hearing impaired, people with developmental disabilities, people who do not read, people who speak English as a second language, and people who speak non-English languages.

## ORGANIZATIONAL ISSUES

**Capacity Building.** The goal of capacity building is to strengthen and broaden the foundation of experience and expertise within an agency so that an agency may ensure its success and longevity. Some areas for capacity building include resource development, fundraising, board development, organizational development, and program planning. Agencies may seek outside assistance through resources provided by SFDPH or other resources to incorporate capacity-building activities into their work.

**Confidentiality.** Rules of confidentiality should be appropriate to the intervention provided. For example, in group settings, participants and facilitators can set ground rules that address issues for disclosure of personal information. In

all cases, California reporting requirements must be adhered to. Agencies should develop their own policies and procedures related to confidentiality for all interventions.

**Policies and Procedures.** All prevention providers should develop and write a comprehensive policies and procedures manual. Critical policies include a confidentiality policy (see above), a feedback and grievance procedure, and safety policies for staff and volunteers. It is important to encourage continuous input and feedback from clients and volunteers about their perceptions of the agency's sensitivity to its target populations. Formal grievance procedures outlining how complaints or disputes are resolved should also be developed. Other policies and procedures may include step-by-step instructions for how to deliver an intervention, protocols for reporting unusual incidents such as injuries, and workplace rules and regulations.

**Service Delivery Training.** Training is an essential element of any prevention program and should be incorporated into both proposals and contracts. Training should be available for and provided to volunteers, peer educators, and paid staff and may include cultural competency training regarding the target population, training on how to deliver the intervention, training on current issues in HIV/AIDS, training on local HIV/AIDS and other health and social services resources, training on how to give referrals, and other topics.

**Volunteers.** Volunteers are an excellent resource for agencies, and they should be given training, support, and supervision. The expectations an agency has for its volunteers should be clearly delineated at the outset of the training. Volunteers should be made aware of the rules and regulations applying to all personnel, in addition to what is required in terms of their knowledge and experience with HIV education and prevention. Issues to consider when taking on volunteers include volunteer safety (e.g., in street outreach situations); possible health hazards (especially for volunteers who do not have



health insurance); financial assistance for any required inoculation, blood testing, or tuberculosis testing (especially for volunteers without health insurance); and incentives in lieu of pay to improve recruitment and retention.

## INTRODUCTION TO THEORIES, STRATEGIES, AND INTERVENTIONS

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The theories, strategies, and interventions discussed here represent suggestions for different ways to approach HIV prevention. Some of the approaches do not fit neatly into a particular category; for example, some theories are also strategies, and some strategies may also be interventions. The taxonomy of "theories, strategies, and interventions" is used as a way to simplify the presentation of the multiple approaches to HIV prevention and is not intended to limit providers in their development of creative programs that are responsive to the needs of their target populations. In fact, providers are encouraged to combine theories, strategies, and interventions, or elements of each of these, in the development of their HIV prevention programs.

The information presented here attempts to summarize the key points for each of the theories, strategies, and interventions. It is impossible to give detailed information about the application of each to every imaginable target population. Therefore, providers are encouraged to do further reading using the references provided, as well as other relevant sources, on the usefulness, application, and effectiveness of the chosen theory, strategy, or intervention for their specific target population. The CDC requirements for evaluation of interventions are listed in Appendix 1 of the Strategic Evaluation chapter (pp. 193-194).

Further, this chapter does not provide guidance on the content or curricula for interventions. The types of prevention information, messages,

and mode of delivery should be dictated by the specific and current prevention needs of the target population. A population's prevention needs can be determined through a needs assessment. Refer to the Needs Assessment chapter (pp. 7-40) for information on the prevention needs of selected target populations, as identified by applied research.

## EVALUATION OF HIV PREVENTION INTERVENTIONS

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In order to determine whether their interventions are effective, providers are expected to develop and measure one outcome objective for one of their interventions. Different types of outcome objectives are appropriate for different interventions, depending on the feasibility of measuring the objective and what can reasonably be expected to result from an intervention.

**Selecting the Type of Objective.** Exhibit 1 shows a "hierarchy" of objectives, from most preferable to least preferable. Providers are encouraged to select the most preferable objective in the hierarchy that is feasible and appropriate for their particular intervention and target population.

**Deciding What to Measure.** The measurable outcome should be in line with the goals of the intervention or program. For example, if the goal is to increase safer sexual behavior, some appropriate outcomes might be increased condom use, decreased number of partners, or decreased unprotected sex.

**Writing the Outcome Objective.** The outcome objective should contain some core components: a time frame, the percent of participants or members of the population expected to experience the effects of the intervention, a defined target population, a defined and measurable effect of the intervention, and how the effect will be measured. For example:

- Time Frame: By June 30, 2001

- Percent of Participants: 60%
- Defined Target Population: African American males who have sex with males who completed two or more IRRC sessions
- Measurable Effect: Increased condom use with receptive anal sex
- How Effect Will Be Measured: Change from baseline pre-test
- Complete Outcome Objective: By June 30, 2001, 60% of African American MSM who completed two or more IRRC sessions will report an increase in the frequency of condom use during receptive anal sex compared with baseline pre-test.

**Measuring the Outcome Objective.** To measure the outcome objective, providers

should: (1) design a short survey or other method to gather the information; (2) determine whether the survey will be self-administered or staff-administered; and (3) develop a system for administering the survey and compiling, entering, analyzing, and reporting the data.

**Using the Information.** Once providers have measured their outcome objective, they should use the information to make changes to or improve their programs. For example, if the participants in a program are not experiencing the expected effects of an intervention, the provider may alter the content or frequency of the intervention to better meet the prevention needs of the target population.

### EXHIBIT I. A HIERARCHY OF OUTCOME OBJECTIVES

<i>Type of Objective (Most to Least Preferable)</i>	<i>Examples of Measurable Outcomes</i>	<i>Sample Outcome Objective</i>
Community-level behavior change	Increased condom use Decreased unprotected sex Decreased needle sharing	By June 30, 2001, there will be a 10% increase in the number of MSM who live in the Castro who report 100% condom use during receptive anal sex compared with baseline pre-test.
Individual behavior change	Increased condom use Decreased unprotected sex Decreased needle sharing	Three months after their first PCM sessions, 50% of all female participants will report an increase in the frequency of condom use during vaginal sex compared with baseline pre-test.
Individual behavioral intention	Intent to use condoms Intent to use needle exchange Intent to discuss serostatus with partner(s)	Between June 30, 2000 and June 30, 2001, 60% of individuals attending a counseling and testing disclosure session will report that they intend to discuss their serostatus with all of their current sexual partners.
Process objective*	Number of condoms distributed Number/type of referrals given Number and demographics of participants	By June 30, 2001, outreach and needle exchange workers will have referred 50 IDUs to drug treatment programs and have conducted referral follow-up with all 50.

\*Process objectives should be developed and measured for all interventions and are not a substitute for outcome evaluation. However, some interventions are not always amenable to outcome evaluation, and in these cases measurement of process objectives represents the minimum expectation.

## Section II: BEHAVIORAL THEORY



**Behavioral Theory.** A model or framework, developed through multiple observations over time, that depicts and predicts how people behave and that shows how the different factors that influence behavior are linked together.

of 2001. Theories are important for HIV prevention because interventions based on sound theoretical models are the most effective at encouraging behavior change (Valdiserri et al., 1992).

### INTRODUCTION

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Behavioral theory can be helpful for developing effective HIV prevention programs. Both informal theories, which providers develop through working with their specific target populations, and formal theories, which have been tested with many different populations, exist. Although only formal theories are presented here, the Implicit Theory Project in progress at the Center for AIDS Prevention Studies (CAPS) (Binson and Eckstrand, 2001) is interviewing San Francisco providers about how they think behavior change happens (i.e., what informal theories they use in their HIV prevention programming). Results are anticipated at the end

### GUIDE TO TABLES IN THIS SECTION

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- **Components.** The principal tenets of the theory.
- **Hypothetical HIV Prevention Example.** An example of how the theory could be applied to understand the HIV prevention needs of an individual or group.
- **Hypothetical Intervention.** An example of an intervention for the individual or group described in the HIV Prevention Example, based on the theory.

## GENERAL (NON-HIV-SPECIFIC) BEHAVIORAL THEORIES

<b>DIFFUSION OF INNOVATIONS</b> (Oldenburg et al., 1997)	
<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Diffusion:</b> "The process by which an innovation is communicated through certain channels over time among the members of a social system."	Gay men in San Francisco have generally responded positively to interventions in which community leaders introduce an idea or a practice that is then spread throughout the community.
<b>Innovation:</b> "An idea, practice, or object that is perceived as new by an individual or other unit of adoption."	An agency wants to promote a practice among gay men of 100% condom use among HIV-negative bottoms and HIV-positive tops to reduce HIV transmission via anal sex.
<b>Innovators, early adopters, early majority adopters, late majority adopters, and laggards:</b> The five categories of "adopters" according to how long it takes them to accept a new idea or implement a new behavior.	Some HIV-negative bottoms and HIV-positive tops already do this (the innovators) but most use condoms only some of the time (the early adopters, early and late majority adopters, and laggards).
<b>Factors that influence the speed and extent of diffusion:</b> Whether the innovation is better than the behavior or condition it will replace; whether it fits with the target audience's existing values, experiences, and needs; and how much commitment it takes to adopt the innovation.	This practice may not be accepted easily because many men may prefer not to use condoms with some partners, especially if they believe they have the same serostatus as their partner; therefore, the practice is not an improvement on what they are already doing. On the other hand, it may be adopted more quickly, for example, among HIV-positive gay men for whom protecting their partners is highly valued.
<b>Hypothetical Intervention:</b> Using natural opinion leaders, an agency designs a program targeted to the early and late majority adopters, focusing on their motivations for changing behavior (e.g., staying HIV-negative or preventing HIV transmission to another). These opinion leaders talk to other gay men (both HIV-negative and HIV-positive) in bars and community settings to promote the practice of 100% condom use and discuss its effectiveness in preventing HIV transmission. The agency maintains this program for two to three years, because changing community norms takes a long time. The agency also uses other strategies to get the message out (e.g., media campaign, street theater).	



<b>EMPOWERMENT EDUCATION THEORY/POPULAR EDUCATION</b> (Freire, 1970; Horton, 1990)	
<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Popular Education:</b> Interventions based on this theory, developed by Brazilian educator Paulo Freire, use a "problem-posing" and participatory methodology of education with a group of individuals from the target community.	A recent needs assessment in a Latino community revealed the presence of high-risk sexual behaviors, such as low rates of condom use with non-primary partners. A long-standing agency that knows the norms and values of this community wants to develop a program to decrease these behaviors and that addresses the behaviors in their social context. The agency convenes a group to outline the problems and to discuss and address the issues in a participatory process. During this process, the agency acts as the agent of change.
<b>Dialogue:</b> In the dialogue process, everyone participates as "co-learners." People discuss and share their experiences in a group.	The agency facilitates a group discussion about HIV/AIDS and HIV prevention, taking into account what they already know about the community's issues and norms. Individuals in the group discuss the specific HIV-related issues they face and learn from each other's experiences.
<b>Critical Consciousness:</b> Dialogue eventually leads to a process of critical reflection in which people begin to see and understand the social context for their personal problems.	The agency plans regular meetings of the group to continue dialogue about the specific factors that affect risk behavior in their community. As they talk about events and issues in their personal lives, the facilitator helps them see common themes that contribute to HIV risk in their community, such as poverty and lack of access to health and social services.
<b>Praxis:</b> The ultimate goal is praxis, which is the continual interplay of discussion, critical thinking, problem solving, and action to promote individual and community change.	Over time, both the individuals and the group begin to develop a sense of power and control over their own lives. Based on group discussions, the agency develops a community outreach intervention. Some of the group members decide to train to become outreach workers. Other members of the group, as a result of the personal sense of empowerment they feel, begin to be involved in their community in new ways, with the goal of promoting social change.
<b>Hypothetical Intervention:</b> See Hypothetical HIV Prevention Example above.	

<b>HEALTH BELIEF MODEL</b> (Streicher and Rosenstock, 1997)	
<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Perceived Susceptibility:</b> People are motivated to change behavior when they believe that they are susceptible to the disease.	A woman has a low perceived susceptibility because no one in her social circle talks about HIV or, to her knowledge, has HIV.
<b>Perceived Severity:</b> People are motivated to change behavior when they believe that the disease generally has serious consequences.	She has a high perceived severity of HIV disease because she reads about HIV-related deaths in the newspaper.
<b>Perceived Benefits:</b> People are motivated to change behavior when they believe that changing the behavior will reduce their risk.	She believes that using condoms will reduce her risk of acquiring HIV.
<b>Perceived Barriers:</b> People are motivated to change behavior when they believe that there are few or no negative consequences (e.g., expensive, dangerous, unpleasant, inconvenient) of changing the behavior.	She is afraid her partner, who has a history of abuse, may accuse her of cheating on him if she asks him to use condoms. Therefore, for her, the benefit of condom use is outweighed by the risk that she may anger her partner.
<b>Cue to Action:</b> A specific stimulus, such as a prevention intervention, is often required to trigger behavior change.	On her way to work every day, she walks by a billboard with an HIV prevention message. She also just heard that her uncle died of HIV 10 years ago, when everyone thought he had died of cancer.
<b>Hypothetical Intervention:</b> Engage the woman in individual counseling, in which the counselor will try to increase the woman's perception of her own risk and susceptibility. The counselor will refer her to domestic violence services and help her learn and practice condom negotiation skills to help her deal with the perceived barriers.	

<b>SOCIAL COGNITIVE THEORY/SOCIAL LEARNING THEORY</b> (Baranowski et al., 1997)	
<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Environment:</b> Factors external to the person may influence behavior.	A gay man has been kicked out of his house by his two homophobic brothers when they learned that he was gay. He moves into a single room occupancy hotel in the Tenderloin. He has no health insurance.
<b>Situation:</b> A person's perception of their environment influences behavior.	He feels that he has no control over his situation - it is the result of how his family has treated him. He sees his peers engaging in commercial sex work for survival and thinks this is his only option.
<b>Behavioral Capability:</b> A person's knowledge and skills to perform a behavior influence whether a person engages in a behavior.	He knows how to use condoms but is not very skilled at talking to his partners/clients about using them.
<b>Outcome Expectations/Expectancies:</b> A person expects certain results from engaging in a particular behavior and places a certain value on the results, and these factors affect their behavior.	He expects that using condoms will prevent him from getting HIV, and this is a highly desirable outcome for him.
<b>Self-efficacy:</b> A person's confidence in performing the behavior affects whether they will engage in the behavior.	He is not very confident that he can get a partner/client to use a condom.
<b>Observational Learning:</b> A person acquires new behaviors from watching the actions of others and observing the results.	Because sex is usually a private act, he does not get to observe how other people negotiate condom use.
<b>Reciprocal Determinism:</b> The interaction of the person, the behavior, and the environment in which the behavior is performed affects a person's behavior.	All the above factors combined affect the man's ability to reduce his risk for HIV. If one of the factors changes, it may result in changes in the other factors.
<b>Hypothetical Intervention:</b> Start a multiple session group workshop at a single room occupancy hotel in the Tenderloin and enroll the man. The group works on changing their perceptions of the environment, so that they feel empowered, and increasing self-efficacy to use condoms in survival sex situations. They will also spend a lot of time on role-playing how to negotiate condom use in different kinds of situations. The group leader or someone at the agency will also refer the man to housing services and enroll him in MediCal.	

SOCIAL NETWORKS/SOCIAL SUPPORT/PEER SUPPORT THEORIES (Wohlfeiler, 1997)	
Components	Hypothetical HIV Prevention Example
<b>Social Networks:</b> "Social networks" refers to the density, complexity, size, and other characteristics of a social group, and they are related to health and well-being.	An adult female alcoholic's social and family networks are unsupportive of her abstinence from drinking, which has been associated with unsafe sexual behavior in her past. She lives with her husband and her sisters, all of whom drink regularly. Her social life revolves around going to bars with her friends. She does not receive strong social support from her family and peers. Her husband is emotionally abusive, and her friends do not support her in her attempts to quit drinking.
<b>Social Support:</b> "Social support" refers to the positive emotional and practical products that people derive from their social networks, and it is related to health and well-being.	
<b>Peer Support:</b> "Peer support" refers to the social support received from peers (people with whom a person identifies because of similar age, race/ethnicity, culture, or other aspects of identity), and it is related to health and well-being.	
<b>Hypothetical Intervention:</b> A case worker conducts an assessment with her client and they agree that her social networks and overall social environment are unhealthy. The case worker refers her to a multiple session group workshop for female substance users focusing on HIV risk reduction. After going to the workshop, the client decides to participate in Alcoholics Anonymous (AA) to develop, promote, and increase her social networks that are supportive for healthy behavior. AA and the workshop provide her with a sense of belonging, opportunities for nurturance, reassurance of worth, guidance and advice in uncertain and adverse circumstances, and access to new and diverse information. In addition to emotional support and encouragement, the case worker helps her get access to health care and other practical needs.	



<b>STAGES OF BEHAVIOR CHANGE MODEL</b> (Prochaska et al., 1997)	
<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Precontemplation:</b> A person has no intention of changing a behavior within the near future.	A male-to-female transgendered injection drug user shares needles with her friends and has no plans to stop sharing.
<b>Contemplation:</b> A person intends to change a behavior within the near future.	A few months later, she has thought about not sharing needles with her friends because she just heard about someone who got HIV that way.
<b>Preparation:</b> A person has begun to take a few steps toward changing a behavior.	A few months later, she starts to ask around about needle exchange.
<b>Action:</b> A person has made changes in a behavior.	She starts going to needle exchange regularly and has stopped sharing needles with friends.
<b>Maintenance:</b> A person is able to continue the new behavior for an extended period of time.	She hasn't shared needles for 8 months.
<b>Pros and Cons:</b> For people to move from one stage to the next, either the pros of changing the behavior must increase and/or the cons of changing the behavior must decrease.	Her case manager helped to move her along the stages of change by talking with her regularly about the pros and cons of sharing needles.
<b>Hypothetical Intervention:</b> A prevention case manager assesses the transgendered woman on intake and finds that she is in the contemplation stage and is thinking about not sharing needles anymore. The case manager works with her to move her toward preparation, action, and finally maintenance by emphasizing the pros of changing the behavior (e.g., HIV is highly transmissible via shared needles, so eliminating sharing will reduce her risk greatly) and reducing the cons (e.g., her perception is that needle exchange is time consuming, but the case manager points out that needle exchange is right around the corner and it is quick and easy). She also teaches her how to clean needles properly and watches her practice this skill. During the maintenance phase, the case manager uses relapse prevention techniques.	

<b>THEORY OF REASONED ACTION</b> (Montano et al., 1997)	
<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Behavioral Intention:</b> Whether a person intends to perform a behavior is the most important predictor of actual behavior.	Many adolescents do not intend to use condoms with their partners.
<b>Attitude:</b> A person's beliefs and values about the behavior determine his or her attitude about the behavior, and attitude affects behavioral intention.	They don't believe that using condoms will completely prevent them from acquiring or transmitting HIV or other STDs, but they place a high value on this result.
<b>Subjective Norm:</b> A person's perception of whether important individuals (e.g., peers) approve or disapprove of the behavior and whether he or she is motivated to act according to those people's opinions determine his or her subjective norm, and subjective norm affects behavioral intention.	They think that other people their age don't generally view condom use in a positive light, and so they are hesitant to discuss condoms with their partners.
<b>Hypothetical Intervention:</b> In a group outreach theater intervention, the youth actors play out a scene in which they talk about the effectiveness of condoms (to change attitudes) and emphasize that condoms can be a fun part of sex (to change subjective norms). They hand out colored condoms at the end of the skit.	

<b>SOCIAL MARKETING THEORY</b> (Kotler, 1982)
Social marketing as a behavior theory applies the concepts of traditional marketing to the "sale" or promotion of healthy behaviors (i.e., the product) to the target group (i.e., the consumer). See the Strategies section of this chapter for use of social marketing as a strategy.

<b>HARM REDUCTION THEORY</b> (Brette, 1991)
Harm reduction theory acknowledges that harmful behavior exists and focuses on the goal of reducing the negative effects of the harmful behavior. It focuses on the attitudes and behaviors of the individual to determine the best ways to decrease the negative effects of the behavior. See the Strategies section of this chapter for use of harm reduction as a strategy.

## HIV-SPECIFIC BEHAVIORAL THEORIES

### AFRICAN CENTERED BEHAVIOR CHANGE MODEL

(Institute for the Advanced Study on Black Family Life and Culture and the Association of Black Psychologists; Nobles and Goddard, undated report)

This theory posits that in order for African-American people to lead healthy lifestyles and change high-risk behavior, they need to know who they are culturally, know their history, and understand the destructive influence of the Maafa, which is the continuous process that supports white supremacy and that is "designed to dehumanize and destroy African people." This model sees two principles as the foundation for changing health beliefs and practices: "The first is an awareness and actualization of the culturally bound history and foundations of the health-related philosophies, traditions, and values of people of African ancestry. The second is an awareness that African Americans' 'anti-healthy' HIV/AIDS/STD-related behaviors are the result of and consistent with historic and alien forces of dehumanization, disintegration, and disease." One way in which this model could be used in HIV prevention is to integrate Afrocentric thought and principles, such as the Nguzo Saba (the seven principles of Kwanzaa), into intervention curriculums, celebrations, and décor. For further information on this model, contact the Institute for the Advanced Study on Black Family Life and Culture, Oakland, CA at (510) 836-3245. For training on this model, contact Denise Giusti-Bradford, San Diego, CA at (619) 582-7149.

### AIDS RISK REDUCTION MODEL

(Catania et al., 1990)

<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Labeling:</b> A person must consciously identify a sexual behavior as high risk for contracting HIV before they will consider any change.	A male teenager has multiple partners and he does not use condoms consistently. However, he has never acquired an STD or HIV, so he does not perceive this behavior as risky.
<b>Commitment:</b> A person must commit to reducing high-risk sexual behavior and/or increase low-risk sexual behavior in order to carry out that change.	He is not committed to using condoms all the time because he thinks sex feels better when he doesn't use condoms.
<b>Enactment:</b> Seeking and enacting strategies to achieve the behavior change goals constitute enactment.	Because he has not committed to using condoms all the time, he has not yet sought information about how to get cheap or free condoms or talked to any friends or trusted adults about sex and condoms.
<b>Hypothetical Intervention:</b> Enroll him in a group workshop with other male teenagers that focuses on increasing perception of risk, emphasizing commitment to safer sex behavior change, increasing self-esteem, enhancing communication skills, and developing and maintaining supportive social networks. Discussions in the group might revolve around changing the perception that no one in their social circles uses condoms, why it is difficult to use condoms every time, what would help make it easier, and practicing the skills needed to make it easier to use condoms every time. To facilitate behavior change, the agency provides free condoms.	

<b>IMB (INFORMATION, MOTIVATION, BEHAVIORAL SKILLS) MODEL</b> (Fisher and Fisher, 1992)	
<i>Components</i>	<i>Hypothetical HIV Prevention Example</i>
<b>Information:</b> People need information regarding HIV transmission and prevention in order to reduce their risk for HIV.	A male IDU knows a lot about how HIV can be transmitted through sharing needles and how to protect himself from getting HIV. He knows how to clean needles properly and where to go for needle exchange.
<b>Motivation:</b> How motivated a person is to change HIV risk behaviors affects whether they act on the information they receive.	He is not motivated to stop sharing needles because in the moment that he needs a fix, HIV doesn't seem that important, and he only shares with people who say they are HIV-negative.
<b>Behavioral Skills:</b> The necessary skills to perform the behavior must be present in conjunction with information and motivation for behavior change to occur.	He is skilled at cleaning his works, but he might benefit from practicing how to avoid getting into situations where his only option for shooting up is with a used, non-sterilized needle.
<b>Hypothetical Intervention:</b> Enroll the man in a prevention case management program that uses a harm reduction approach. The case manager and the man develop an individualized prevention plan that includes finding ways to maximize his use of needle exchange, increasing condom use, and practicing skills to avoid situations that could lead to unsafe behavior. The case manager also explores his lack of motivation to change behavior and attempts to increase his motivation over time. The case manager refers him to drug treatment and mental health services as appropriate, as well as assists him to enroll in support groups and workshops that will help him maintain his risk reduction.	

## Section III: STRATEGIES AND INTERVENTIONS



**Strategy.** A prevention approach that can be applied across a spectrum of possible interventions (such as peer education).



**Intervention.** The type of service a prevention program provides (e.g., individual sessions, outreach, educational workshops).

### INTRODUCTION

There are numerous types of strategies and interventions for HIV prevention, and new ones are constantly evolving. The main strategies and interventions used in San Francisco and other urban settings are described here. Two interventions that are not discussed in detail here are vaccines and microbicide distribution,

as they are not currently available. However, they are worth noting as they may become viable interventions in the future. Vaccines protect people from acquiring HIV infection (preventive vaccines) or protect people from becoming ill after they have already acquired the virus (therapeutic vaccines). Over 56 preventive vaccine trials have been conducted in humans, but extensive studies remain to be done before a vaccine is widely available. Microbicides are substances that can be applied intravaginally or intrarectally to prevent pregnancy and/or the transmission of STDs/HIV. Nonoxynol-9 is one example, although the CDC no longer recommends this agent for protection against HIV (<http://www.cdc.gov/hiv/pubs/mmwr/mmwr11aug00.htm>). Several microbicides are in various stages of human testing, but none are currently



available for general use. Research is needed regarding their use during both vaginal and anal sex, so that microbicide distribution can target heterosexual populations as well as MSM populations.

Although the most obvious target audiences for the HIV prevention strategies and interventions described here are the populations at risk, providers may also consider targeting programs at individuals or groups who serve the population at risk, such as health care providers and other non-HIV prevention service providers. Such programs may include cultural competency training, training on federal, state, or local standards and guidelines (e.g., for counseling and testing), or training on how to educate and counsel patients about HIV-related issues (e.g., HIV training for STD health care providers).

## GUIDE TO TABLES AND TEXT IN THIS SECTION

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- **Definition/Description.** A brief overview of the strategy/intervention.

- **Implementation Recommendations.** HPPC recommendations regarding how a strategy/intervention should be implemented and/or references or links to other published guidelines.
- **Implementation Requirements (for interventions only).** If applicable, references or links to federal, state, and local required standards for service provision.
- **Strengths and Limitations.** Information regarding for which situations the strategy/intervention may or may not be appropriate.
- **Effectiveness.** A summary of the effectiveness of the strategy or intervention as applied to HIV prevention, based on current intervention research.
- **Evaluation (for interventions only).** Recommendations for how to implement evaluation for the intervention.

## STRATEGIES

### GENERAL (NON-HIV-SPECIFIC) STRATEGIES

COMMUNITY ORGANIZING	
<b>Definition/ Description</b>	Community organizing involves community-wide efforts that bring together members of the targeted community to discuss problems and jointly propose solutions for HIV and/or other related issues (drug use, homophobia, racism, etc.). Community organizing strategies often have a basis in empowerment theory, as well as other theories.
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Allow the problem, the solution, and the course of action to be defined by the community.</li> <li>• Facilitate the process, participate in dialogue regarding HIV information, and secure resources to promote community involvement and assist the community in attaining its goals.</li> <li>• Address multiple needs of communities or collaborate with other agencies that can address those issues.</li> </ul> <p>Community organizing/empowerment strategies should:</p> <ul style="list-style-type: none"> <li>• Develop and strengthen social norms for HIV prevention.</li> <li>• Increase communication channels for HIV prevention norms.</li> <li>• Increase participants' self advocacy skills and sense of personal control and power.</li> <li>• Identify barriers to HIV prevention in the community.</li> <li>• Increase community participation around issues affecting the community.</li> <li>• Acknowledge and give consideration to existing strategies that are working in a community.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Community-Level Intervention: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>Community organizing:</p> <ul style="list-style-type: none"> <li>• Has a strong theoretical foundation.</li> <li>• Makes the community's own perspective and desires central.</li> <li>• Addresses community-level obstacles to HIV risk reduction.</li> <li>• Creates networks that can be used to conduct other interventions.</li> <li>• Can contribute to health-promoting social norms.</li> <li>• Is suitable for communities that have a strong identification (e.g., geographically, culturally), isolated populations, and groups with multiple issues.</li> </ul>
<b>Limitations</b>	<p>Community organizing:</p> <ul style="list-style-type: none"> <li>• Is more difficult to implement with isolated populations than with groups with a strong identity.</li> <li>• May not be appropriate for populations that fear lack of confidentiality or those for which identification could endanger the community, such as undocumented immigrants or commercial sex workers.</li> </ul>

**Effectiveness.** A number of studies have indicated community organizing to be an effective HIV prevention strategy. Results from studies

of some programs that used this strategy include decreases in unprotected anal sex among gay men (Coates and Greenblatt, 1990),

(Kegeles et al., 1996), higher willingness to give HIV prevention advice to drug-using friends and relatives among Latina/os and non-Latino Whites (Marin et al., 1992), individual and community-level behavior change among gay and

bisexual men (Bueling et al., 1995), and increased knowledge and behavior change among Mexican gay men (Zimmerman et al., 1997). This strategy is also considered cost-effective (Kahn, 1995).

<b>DRAMA, THEATER, AND ROLE-PLAY</b>	
<b>Definition/ Description</b>	This strategy encompasses any activities that use acting, theater, music, story-telling, puppetry, role-play, or other dramatization techniques to deliver HIV prevention interventions. It may be used in individual (e.g., role-play), small-group (e.g., skits) or community-level interventions (e.g., street theater). The drama may be performed by professional or amateur actors as an intervention for the audience (e.g., a formal theatrical presentation) or by members of the target population as an intervention for themselves (e.g., participants in a group workshop doing role plays with each other).
<b>Implementation Recommendations</b>	<p><u>Drama and Theater:</u> Actors should:</p> <ul style="list-style-type: none"> <li>• Be available to answer questions and give referrals after the presentation.</li> </ul> <p>Dramatizations should:</p> <ul style="list-style-type: none"> <li>• Depict realistic scenarios.</li> <li>• Integrate communication of accurate HIV/AIDS information into the performance.</li> <li>• Address the target population's attitudes and beliefs about HIV transmission.</li> </ul> <p><u>Role-Play:</u> Role-play should:</p> <ul style="list-style-type: none"> <li>• Be grounded in realistic scenarios.</li> <li>• Incorporate practice of skills (e.g., condom negotiation).</li> <li>• Be followed by discussion.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>Theater:</p> <ul style="list-style-type: none"> <li>• Can encourage positive attitudes toward people living with HIV/AIDS (Valente and Bharath, 1999).</li> <li>• Can model and encourage condom use (Elliott et al., 1996).</li> <li>• Is useful for individuals who do not speak or read English.</li> </ul> <p>Role-play:</p> <ul style="list-style-type: none"> <li>• Can address the multiple issues people face in their lives that affect HIV risk behavior.</li> </ul>
<b>Limitations</b>	Theater when used alone may be limited in its ability to affect behavior.

**Effectiveness.** Although drama and theater are being used more widely as HIV prevention strategies, especially for youth, their effectiveness has not been thoroughly studied (Elliott et al., 1996). One study found that a theater intervention did not have a significant impact on HIV knowledge, attitudes, or risk behavior (Elliott et al., 1996), but others theater interventions resulted in increases in knowledge (Skinner et al., 1991; Valente and Bharath, 1999) and intent to change behavior (Skinner et al.,

1991). In the absence of extensive effectiveness data, theater interventions are probably best used in combination with other strategies or interventions with proven effectiveness (Skinner et al., 1991). Role play has been used effectively; an intervention with low-income African-American mothers used role play to validate their experiences and explore steps toward behavior change (Downing et al., 1999). No information on cost-effectiveness of these strategies was found in the literature.



<b>HARM REDUCTION*</b>	
<b>Definition/Description</b>	This strategy accepts that harmful behavior exists, and the main goal is to reduce the negative effects of the behavior rather than ignore or pass judgment on the person or the behavior. The term "harm reduction" is used most often in the context of drug use, but the approach can be used with sexual risk behavior as well. A harm reduction approach encourages safer drug use or sexual practices among those engaging in high risk behaviors and acknowledges the social and environmental factors such as poverty and racism that affect drug use.
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Attempt to reach clients "where they are" to assist them in making choices toward better health.</li> <li>• Be attentive to the health and well-being of the entire person in considering when to use harm reduction options.</li> </ul> <p>Harm reduction messages:</p> <ul style="list-style-type: none"> <li>• Should be designed for a specific target audience, taking into consideration the population's norms and behaviors.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Implementation Requirements</b>	See San Francisco Health Commission Resolution on Harm Reduction: <a href="http://www.dph.sf.ca.us/hcres/html/hc%5Fresolutions%5F1000.htm">http://www.dph.sf.ca.us/hcres/html/hc%5Fresolutions%5F1000.htm</a>
<b>Strengths</b>	<p>Harm reduction:</p> <ul style="list-style-type: none"> <li>• Can be used in an institutional (e.g., drug treatment facility) or community (e.g., outreach) setting.</li> <li>• Can encourage safe injection practices and condom use.</li> <li>• Can encourage positive risk reduction attitudes.</li> <li>• Can provide linkages to drug treatment.</li> </ul>
<b>Limitations</b>	<p>Harm reduction:</p> <ul style="list-style-type: none"> <li>• Does not eliminate the potential harmful effects of a behavior.</li> <li>• May not be as useful for individuals not ready to change harmful behaviors.</li> <li>• May lead to increased harmful behavior if not implemented well (e.g., a harm reduction message that encourages withdrawal before ejaculation could inadvertently lead to decreased condom use or increased number of sex partners).</li> </ul>

\*See also: Needle Exchange in the Interventions section and Condom Distribution in the Strategies section.

**Effectiveness.** A large number of studies establish the effectiveness of a harm reduction approach in regard to high-risk injection behaviors and sexual behaviors, particularly when used in combination with counseling and health education (Brette, 1991). Several studies of methadone maintenance programs show that substitution of an oral opiate for injection reduces high-risk injection behaviors and risk for HIV (Brette, 1991). In one San Francisco study, participation in methadone maintenance for one year was shown to be highly associated with not becoming HIV-positive, although

African-Americans experienced a significantly higher rate of seroconversion compared with Whites (Moss et al., 1994). A harm reduction approach to injection drug use is also an effective secondary prevention technique, decreasing the risk of progressing from HIV to AIDS for HIV-positive IDUs (Brette, 1991). Condom use is also an extremely effective harm reduction intervention for decreasing risk for HIV infection and has not been shown to increase or encourage sexual behavior when used with adolescents (Centers for Disease Control and Prevention, 1999b).

<b>INTERNET/COMPUTER</b>	
<b>Definition/Description</b>	There are many different kinds of Internet- and computer-based HIV prevention strategies, including listservs, chat rooms, electronic bulletin boards, informational websites with links to resources, and computerized surveys and assessments. These can be used in the context of individual interventions (e.g., email exchanges between client and provider regarding risk reduction), small group interventions (e.g., single session group workshops done in a chat room), or community-level interventions (e.g., an Internet media campaign).
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Develop user-friendly, interactive approaches.</li> <li>• Provide training (and advocate for training in schools) on how to use computers and the Internet to access HIV-related information and resources.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>Internet strategies:</p> <ul style="list-style-type: none"> <li>• Can reach large numbers of people over a wide geographic area.</li> <li>• Present opportunities for prevention using channels that people use to solicit sex partners (e.g., chat rooms) (Bull and McFarlane, 2000).</li> <li>• May be perceived as more anonymous and thus may be more useful for populations desiring anonymity.</li> </ul> <p>Computerized surveys and assessments:</p> <ul style="list-style-type: none"> <li>• Used in health care settings may be useful for groups such as adolescents who may be embarrassed or uncomfortable talking to a provider about their sexual or drug use risk behaviors.</li> </ul>
<b>Limitations</b>	<p>Internet and computer strategies:</p> <ul style="list-style-type: none"> <li>• Will not reach those without Internet access or computer skills, who may be low-income or marginalized groups and at high risk for HIV</li> <li>• May compromise anonymity/confidentiality if identifying information is requested or given over the Internet.</li> </ul>

**Effectiveness.** The effectiveness of Internet and computer strategies for HIV prevention has not been established. One study showed that a computer-based prevention strategy that assessed condom attitudes, condom use behavior, and readiness to adopt consistent condom

use was acceptable to a group of high-risk women, who reported that they liked the feedback the computer gave them and would recommend the program to a friend (Brown-Peterside et al., 2000).

<b>NATURAL OPINION LEADERS</b>	
<b>Definition/Description</b>	With the natural opinion leaders strategy, key people who are recognized as influential and charismatic members of a community or communities are identified as models of opinions and behaviors with the goal of influencing the opinions and behaviors of a target population.
<b>Implementation Recommendations</b>	<p>Opinion leaders should:</p> <ul style="list-style-type: none"> <li>• Be identified and determined by the target population.</li> <li>• Be individuals who have the capacity to truly influence social norms.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Community Level Intervention: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123.</p>
<b>Strengths</b>	<p>An opinion leader strategy:</p> <ul style="list-style-type: none"> <li>• Is appropriate for people with a group identification, those who recognize community leaders, those who value media heroes (e.g., youth), those with perceptions of low risk, and those groups in which social stigma exists for homosexuality or injection drug use.</li> </ul>
<b>Limitations</b>	<p>An opinion leader strategy:</p> <ul style="list-style-type: none"> <li>• May not be appropriate for those lacking community identification.</li> </ul> <p>Opinion leaders:</p> <ul style="list-style-type: none"> <li>• May increase awareness and knowledge of HIV/AIDS, but they may not result in behavior change, especially when they are high-profile individuals (e.g., Magic Johnson).</li> <li>• May not engage in HIV preventive behaviors themselves, and thus may not always be good role models.</li> </ul>

**Effectiveness.** Natural opinion leader strategies have been shown to be effective for different populations. One study of an opinion leader intervention among gay men showed decreases in the percent engaging in unprotected anal sex, increases in condom use, and decreases in the percent reporting multiple sex partners

(Kelly et al., 1991). Use of popular opinion leaders in an intervention for women living in low-income inner-city neighborhoods resulted in increased condom use and reduced unprotected sex (Sikkema et al., 2000). This strategy was deemed very cost-effective in two studies (Grossberg et al., 1993), (Kahn, 1995).

<b>PEER EDUCATION</b>	
<b>Definition/ Description</b>	With the peer education strategy, services are provided to a target population by individuals recruited from that target population, which may be defined by behavior, culture, race, age, ethnicity, gender identification, or other salient factors.
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Provide counseling, supervision, safety and support structures, and adequate wages or incentives for their peer educators.</li> <li>• Establish a contract with each peer educator detailing his or her responsibilities and compensation.</li> <li>• Incorporate feedback and experiences of peer educators into program development.</li> <li>• Ensure diversity among peer educators.</li> <li>• Train staff on the issues of their peer educators.</li> </ul> <p>Peer educators should:</p> <ul style="list-style-type: none"> <li>• Be perceived as credible and as true peers by the target population.</li> <li>• Address behavior change as well as provide information.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction (Centers for Disease Control and Prevention, 1995) under Individual and Group Interventions: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, p. 123.</p>
<b>Strengths</b>	<p>Peer education:</p> <ul style="list-style-type: none"> <li>• Has a theoretical foundation in diffusion of innovations theory.</li> <li>• Draws on established social networks to disseminate information.</li> <li>• Can be used in individual, group, and community-level interventions and with all populations.</li> <li>• Can assist in changing the perception of norms regarding HIV and risk behaviors (DiClemente, 1993).</li> <li>• Can assist in creating social networks that support and encourage self-protective behaviors (DiClemente and Houston-Hamilton, 1989).</li> <li>• Is especially suited for populations who do not initially perceive themselves to be at risk.</li> <li>• Can lead to behavior change for the peer educators themselves.</li> </ul>
<b>Limitations</b>	<p>Peer education:</p> <ul style="list-style-type: none"> <li>• May not be appropriate for small/close communities where stigma may still be attached to HIV concerns or people desiring anonymity. (Some groups may prefer to receive HIV prevention services from people outside of their immediate community, so that they can talk more freely and not fear disclosure of information.)</li> </ul> <p>Peer educators:</p> <ul style="list-style-type: none"> <li>• May not engage in HIV preventive behaviors themselves, and thus may not always be good role models.</li> <li>• May experience a high burn-out rate.</li> </ul>

**Effectiveness.** Several studies have shown that peer education is an effective strategy. Among gay men, peer education was effective in reducing the number of anal sex partners (McKusick et al., 1991) and other high-risk sexual behaviors (Kelly et al., 1992). It has also

been shown to contribute to increases in knowledge and intention to use condoms among youth (Lem et al., 1994). Peer education for women living in low-income inner-city neighborhoods resulted in increased condom use and reduced unprotected sex (Sikkema et al., 2000).



Peer education increased HIV knowledge but did not result in behavior change among homeless and runaway teens in one study (Booth et al., 1999). This strategy may be more effective in many situations than interventions delivered via non-peers (Catania et al., 1991), (Coates and

Greenblatt, 1990); (Dorfman et al., 1992), especially for adolescents (Lem et al., 1994), because peers may be viewed as more credible, more sensitive, and better able to understand the target population. No information was found in the literature on cost-effectiveness.

<b>SOCIAL MARKETING</b>	
<b>Definition/ Description</b>	Social marketing is the concept of using traditional consumer marketing tools to promote healthy behaviors, change social norms, or recruit target audiences for participation in health promotion activities. Social marketing strategies require attention to the four "Ps": product (the behavior or idea you are trying to promote), price (the monetary or other costs/disadvantages associated with adopting the behavior or idea), promotion (which media channels you will use), and place (how and where you will disseminate the message so that it reaches the target population).
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Conduct market research, field testing, and evaluation for their social marketing campaigns.</li> <li>• Conduct formative evaluation to ensure the cultural and linguistic appropriateness of the campaign, the salience of the issues, the stage of behavior change, the social norms, and appropriate message channels for the target population.</li> <li>• Involve the recipients of information or services (the "product") at each stage of the campaign.</li> </ul> <p>Social marketing campaigns should:</p> <ul style="list-style-type: none"> <li>• Attempt to change behavior by demonstrating the desired behavior in a real-life context.</li> <li>• Promote the idea that adoption of this behavior will result in lower HIV risk.</li> <li>• Link the target population to available resources.</li> <li>• Affirm health-promoting social norms of the target population.</li> <li>• Be designed to increase knowledge and change attitudes about HIV/AIDS.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Community Level Intervention: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123-127; 3. The Interventions section of this chapter under Community Level Interventions: Media.</p>
<b>Strengths</b>	<p>Social marketing:</p> <ul style="list-style-type: none"> <li>• Can be effective with those who need new information to change behavior and with those who want to change their behavior but have not.</li> <li>• Can motivate people to take action.</li> <li>• Can be accessible to those who are difficult to reach through traditional prevention channels because it can reach large and diverse segments of the population.</li> </ul>
<b>Limitations</b>	<p>Social marketing:</p> <ul style="list-style-type: none"> <li>• May not be appropriate for those engaging in the highest risk behavior.</li> <li>• May be unsuccessful with those who are isolated and do not see themselves in relation to the campaign.</li> <li>• Is difficult to pinpoint as the cause of behavior change.</li> <li>• Can be expensive.</li> </ul>

**Effectiveness.** Social marketing has been used effectively in HIV prevention in a number of ways, although it has not been used as extensively in the United States as it has been in other countries. In Britain, social marketing campaigns were successful at increasing knowledge of HIV/AIDS in the general population (Mills et al., 1986), (Wober, 1988). In the

United States, social marketing has been used successfully to recruit gay men from multiple subgroups, including men of color, youth, and closeted men, for HIV prevention counseling (Fisher et al., 1996), to increase dialogue and awareness of HIV among gay men (Dawson and Hartfield, 1996), to motivate gay men to get tested for HIV (Dawson and Hartfield, 1996),

and to increase condom use among adolescents (Kennedy et al., 2000b). No information on cost-effectiveness was found in the literature, but it

is probably more cost-effective when targeted to high-risk groups as opposed to the general population.

## HIV-SPECIFIC STRATEGIES

CONDOM DISTRIBUTION	
<b>Definition/Description</b>	With this strategy, condoms (female and/or male) are acquired and distributed to members of the target population.
<b>Implementation Recommendations</b>	<p>Condom distribution should:</p> <ul style="list-style-type: none"> <li>• Be used in combination with other strategies or interventions (i.e., it is not an intervention in itself).</li> <li>• Be accompanied by instructions for proper use, either verbal or written.</li> <li>• Be accompanied by information about the benefits and risks of nonoxynol-9*, if condoms with nonoxynol-9 are distributed.</li> </ul> <p>Condom distribution methods should:</p> <ul style="list-style-type: none"> <li>• Be applied to the distribution of microbicides, if and when they become available for use with vaginal or anal sex.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>Condom distribution:</p> <ul style="list-style-type: none"> <li>• May reduce barriers to safer sex for some populations (e.g., for those who cannot afford condoms, those who are embarrassed to buy condoms such as teens).</li> </ul>
<b>Limitations</b>	<p>Condom distribution:</p> <ul style="list-style-type: none"> <li>• May have limited effectiveness in some populations unless accompanied by other interventions or strategies.</li> <li>• May be controversial in school settings.</li> </ul>

\*Nonoxynol-9 is no longer recommended by the CDC as an effective means for preventing HIV transmission (<http://www.cdc.gov/hiv/pubs/mmwr/mmwr11aug00.htm>).

**Effectiveness.** Condom use is an extremely effective harm reduction intervention for decreasing risk for HIV infection (CDC, 1999b), and condom distribution ensures availability and accessibility of condoms. Condom distribution has also been associated with increased condom use African American men and women

in one community-level, targeted distribution effort (Cohen et al., 1999). The cost savings to the health care system and society per condom used consistently and correctly is \$27 for high-risk heterosexuals and at least \$530 per condom for MSM (CDC, 1999b), making this a highly cost-effective strategy.



<b>SEROSTATUS APPROACH</b>	
<b>Definition/Description</b>	This strategy directs HIV prevention activities toward HIV-positive individuals and high-risk individuals who are either HIV-negative or do not know their serostatus. The goal is to direct people to appropriate interventions based on their serostatus; thus, encouraging people to get tested is an inherent component of this approach.
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Encourage clients to learn their serostatus, using safe, anonymous, culturally sensitive referrals to counseling and testing</li> <li>• Develop linkages and partnerships with agencies that provide care services and prevention for positives.</li> </ul> <p>For high-risk HIV-negative individuals, agencies should:</p> <ul style="list-style-type: none"> <li>• Refer clients to appropriate HIV prevention programs that focus on risk reduction.</li> </ul> <p>For HIV-positive individuals, agencies should:</p> <ul style="list-style-type: none"> <li>• Refer clients to appropriate HIV/AIDS health services.</li> <li>• Refer clients to appropriate HIV prevention for positives programs that focus on risk reduction.</li> <li>• Refer seronegative partners to appropriate HIV prevention programs.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>The serostatus approach:</p> <ul style="list-style-type: none"> <li>• Can reach individuals who do not know their serostatus, and people who know they are HIV positive are more likely to take action to protect their partners (Centers for Disease Control and Prevention, undated report).</li> <li>• May help prevent opportunistic infections for HIV-positive individuals through referrals to treatment, and thus potentially decrease their ability to transmit HIV (Centers for Disease Control and Prevention, undated report).</li> <li>• Addresses the risks of clients' partners (Centers for Disease Control and Prevention, undated report).</li> <li>• Can provide much needed links between prevention and care services.</li> </ul>
<b>Limitations</b>	<p>The serostatus approach:</p> <ul style="list-style-type: none"> <li>• May not reach high-risk individuals who do not know their serostatus who are members of marginalized or hard-to-access populations.</li> <li>• May be difficult to implement given the segmentation of prevention and care funding.</li> </ul>

**Effectiveness.** No studies evaluating this specific approach were found. Because this strategy targets only high-risk individuals, it is likely

more cost-effective than a non-targeted approach (CDC, undated report).

<b>PREVENTION FOR POSITIVES</b>	
<b>Definition/Description</b>	Prevention for positives consists of any strategy or intervention whose target population is HIV-positive individuals and for which the content of the intervention is designed to address the specific prevention needs of HIV-positive persons. Prevention for positives encompasses both primary prevention (i.e., prevention of HIV transmission to others), secondary prevention (i.e., health promotion and prevention of HIV disease progression), and STD prevention.
<b>Implementation Recommendations</b>	See (Collins et al., 2000) at <a href="http://www.caps.ucsf.edu/publications/pozmono.pdf">http://www.caps.ucsf.edu/publications/pozmono.pdf</a> See also: 1. General Recommendations section in this chapter, pp. 123-127.
<b>Strengths</b>	Prevention for positives: <ul style="list-style-type: none"> <li>• Involves HIV-positive individuals in the prevention of HIV transmission, when most efforts to date have focused on HIV-negative persons.</li> <li>• Can provide much needed links between prevention and care services.</li> </ul>
<b>Limitations</b>	Prevention for positives: <ul style="list-style-type: none"> <li>• Has not been thoroughly evaluated; therefore, little is known about how to maximize its effectiveness.</li> <li>• May be difficult to implement given the segmentation of prevention and care funding.</li> <li>• Faces many barriers to implementation, including legal (e.g., criminalization of non-disclosure of HIV status), policy (e.g., lack of funding for prevention for positives), and environmental barriers (e.g., stigma) (Shriver et al., 2000).</li> </ul>

**Effectiveness.** Limited studies have been done on the effectiveness of prevention for HIV-positive individuals. In one intervention targeting HIV-positive adolescents with hemophilia, adolescents who perceived peer support for safer sex behavior were more likely to maintain safer sex behavior (Brown et al., 2000). A number of studies are currently underway at the Center for AIDS Prevention Studies (CAPS) in San Francisco that are evaluating primary and secondary HIV prevention initiatives for HIV-

positive individuals: The Unity Project (MSM, women, IDUs, <http://www.caps.ucsf.edu/unity/>), Role that HIV-Positive Gay and Bisexual Men Can Play in Preventing New Infections (gay and bisexual men, <http://www.caps.ucsf.edu/projectregistry.html#hays>), the BAY MEN Project (gay and bisexual men, <http://www.caps.ucsf.edu/BayMen/>), and Programs for HIV+ Inmates in San Quentin (<http://www.caps.ucsf.edu/projects/mapindex.html>).

## INTERVENTIONS

### ONE-ON-ONE INTERVENTIONS



**One-on-One Interventions.** Interventions in which a provider interacts with clients, in face-to-face or non-face-to-face situa-

tions, in individually focused, client-centered encounters.

#### VENUE-BASED STREET AND COMMUNITY INDIVIDUAL OUTREACH (VBIO)

<b>Definition/Description</b>	VBIO is a face-to-face interaction between an outreach worker (or a team of outreach workers) and a client or a small group of clients that takes place on the street or in venues where the target population may congregate* at appropriate times of the day, night, week, and year. VBIO may be a one-time intervention or part of a long-term relationship established by the outreach worker with clients in a particular community.
<b>Implementation Recommendations</b>	<p>Outreach workers should:</p> <ul style="list-style-type: none"> <li>• Work in pairs or teams for safety reasons.</li> </ul> <p>VBIO should:</p> <ul style="list-style-type: none"> <li>• Include (1) distribution and demonstration of prevention materials, such as latex barriers and bleach kits, (2) assessment of a client's needs, (3) provision of health education/risk reduction information and referrals, and (4) dialogue about a client's issues regarding HIV</li> <li>• Address continued risk behaviors in the face of HIV knowledge.</li> <li>• Be conducted as prevention case management for chronic high risk behaviors.</li> <li>• Be consistent and continuous and involve client follow-up when possible.</li> <li>• Should occur in the evening and early morning hours to reach high-risk populations.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Street and Community Outreach: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>VBIO:</p> <ul style="list-style-type: none"> <li>• Can reach large numbers of people.</li> <li>• Can be implemented creatively, using media, video, and other interactive technology.</li> <li>• Is appropriate for youth (Givertz and Katz, 1993), out-of-treatment IDUs (Rahimian and Pach, 1999), populations who have a low perception of personal risk for HIV, those with lack of access to health and social services, and those in need of basic information.</li> </ul>
<b>Limitations</b>	<p>VBIO:</p> <ul style="list-style-type: none"> <li>• May not be suitable for individuals with serious mental health stressors or for those who are well-informed but continue to show high rates of infection.</li> <li>• May not be appropriate or allowed in certain venues.</li> <li>• May lose its impact if it is over-concentrated in a venue.</li> <li>• Cannot always meet clients' needs for services because of a lack of available referral resources.</li> </ul>

\*Examples of venues are homes, raves, schools, churches, temples, synagogues, mosques, hospitals, sport leagues, gyms, the general assistance office, single room occupancy hotels (SROs), halfway houses, public housing, laundromats, crack houses, fairs and other community events, massage parlors, porn theaters, bars, night clubs, community centers, gambling parlors, and businesses (such as Tower Records).

**Effectiveness.** This strategy has been shown to be effective in changing various risk behaviors among different populations. It has been successful for decreasing injection drug use-related risk behavior (Watters et al., 1990; Weibel et al., 1993) as well as sexual risk behavior (Birkel et al., 1993). In addition, having had contact with an outreach worker has been associated with other preventive behaviors, such as getting an HIV test and carrying condoms among homeless youth (Gleghorn et al., 1997). However, not all populations have shown equal levels of behavior change (e.g., women and youth showed the least sexual behavior changed in the (Birkel et al., 1993) study).

**Evaluation.** In the case of outreach, it may be difficult to measure behavioral or other outcomes resulting from the intervention because outreach encounters do not always allow for follow-up to track behavior change over time. Therefore, outreach may be best evaluated through process objectives. Such objectives may focus on number of contacts made, percent of contacts who are repeat/follow-up contacts, number and type of prevention materials distributed, number and type of referrals given, and demographics and current risk behaviors of clients.



<b>PREVENTION CASE MANAGEMENT (PCM)</b>	
<b>Definition/Description</b>	<p>"PCM is a client-centered HIV prevention activity with the fundamental goal of promoting the adoption and maintenance of HIV risk-reduction behaviors by clients with multiple, complex problems and risk-reduction needs. PCM is intended for persons having or likely to have difficulty initiating or sustaining practices that reduce or prevent HIV acquisition, transmission, or reinfection. As a hybrid of HIV risk-reduction counseling and traditional case management, PCM provides intensive, on-going, individualized prevention counseling, support, and service brokerage. This HIV prevention activity addresses the relationship between HIV risk and other issues such as substance abuse, STD treatment, mental health, and social and cultural factors." (CDC HIV Prevention Case Management Guidance, September 1997) PCM is used with HIV-negative and HIV-positive individuals and can be provided in a face-to-face or non-face-to-face setting.</p>
<b>Implementation Recommendations</b>	<p>See the CDC HIV Prevention Case Management Literature Review and Current Practice (Centers for Disease Control and Prevention, 1997b): <a href="http://www.cdc.gov/hiv/pubs/hivpcml.htm">http://www.cdc.gov/hiv/pubs/hivpcml.htm</a></p> <p>See the CDC review of PCM programs across the country (Purcell et al., 1998).</p> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Implementation Requirements</b>	<p>See the CDC Prevention Case Management Guidance (Centers for Disease Control and Prevention, 1997a), <a href="http://www.cdc.gov/hiv/pubs/hivpcmg.htm">http://www.cdc.gov/hiv/pubs/hivpcmg.htm</a></p> <p>See the SFPDPH website for the AIDS Office PCM standards</p> <p>Note: The CDC Guidance states that PCM should include (1) client recruitment and engagement, (2) screening and assessment of HIV and STD risks and medical and psychosocial service needs, (3) development of a client-centered prevention plan, (4) multiple-session HIV risk-reduction counseling, (5) active coordination of services with follow-up, (6) monitoring and reassessment of clients' needs, risks, and progress, and (7) discharge from PCM upon attainment and maintenance of risk-reduction goals. For HIV-positive individuals, PCM should involve primary and secondary prevention in collaboration with CARE case management.</p>
<b>Strengths</b>	<p>PCM:</p> <ul style="list-style-type: none"> <li>• Is appropriate for HIV-positive individuals, high-risk HIV-negative individuals, and high-risk individuals who do not know their serostatus.</li> <li>• Is suitable for people seeking some stability/regularity in their lives, people who are reaching an action stage in dealing with health concerns, people receiving outreach (if the intervention is mobile), and health center or hospital patients.</li> </ul>
<b>Limitations</b>	<p>PCM:</p> <ul style="list-style-type: none"> <li>• May not be appropriate for people with low perception of their risk for HIV or for individuals who are not able to keep appointments.</li> <li>• Is not sufficient for forging a relationship with the community unless accompanied by outreach or other interventions.</li> </ul>

**Effectiveness.** Because prevention case management is a relatively new approach to HIV prevention, no studies to date have evaluated the effectiveness of prevention case management specifically. However, the San Francisco AIDS Office is currently conducting a study

evaluating the effectiveness of PCM. In addition, CDC conducted an assessment of PCM programs across the country and discovered that many had attempted to collect outcome data but none had completed an analysis (Purcell et al., 1998). There are many reasons to

believe that it is an effective strategy. It is a comprehensive and intensive approach that assists individuals to address the multiple potential factors that affect HIV risk-taking behavior. In addition, intensive one-on-one interaction can build self-efficacy, which is a strong predictor of low sexual risk-taking (Stall et al., 1988).

**Evaluation.** Changes in HIV risk behavior, such as increased condom use, decreased number of partners, decreased needle sharing, and increased use of sterilized needles, are possible

outcomes of PCM. Evaluation of this intervention should include a pre-test and one or more post-tests given at a specified interval to each client (e.g., pre-test given at the beginning of the first session and post-tests after each PCM session, after a certain number of PCM sessions, or at regular time intervals such as every 2 months). The time interval chosen should be sufficient to allow behavior change to occur. Ideally, a follow-up post-test should be given one month or longer after completion of PCM, but this is not always possible.

<b>INDIVIDUAL RISK REDUCTION COUNSELING (IRRC)</b>	
<b>Definition/Description</b>	IRRC is a personalized, client-centered encounter between an individual and a trained counselor provided in a face-to-face or non-face-to-face setting. It can be a one-time intervention, or the client and counselor can meet multiple times. IRRC is highly mobile and can take place in an outreach setting, clinic, community center, or over the telephone.
<b>Implementation Recommendations</b>	<p>According to the Units of Service document developed by the AIDS Office, IRRC should:</p> <ul style="list-style-type: none"> <li>• Consist of counseling sessions that are at least 30 minutes long</li> <li>• Include (1) HIV/STD information and dissemination, (2) documentation of discussion of risk behaviors, (3) counseling, (4) skills building, and (5) documented referral(s), if given.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Street and Community Outreach: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123-127</p>
<b>Strengths</b>	<p>IRRC:</p> <ul style="list-style-type: none"> <li>• Is generally suitable for all populations, especially for people who are reaching an action stage in dealing with health concerns, people receiving outreach (if the intervention is mobile), and health center or hospital patients.</li> <li>• Provides personal attention to individuals for whom privacy and confidentiality is important.</li> <li>• Provides opportunities to recruit clients for other prevention activities.</li> <li>• Can be mobile, allowing flexibility to reach many populations.</li> <li>• Provides opportunities for linkages and referrals to other social and medical services, especially CTR/PCRS.</li> <li>• Provides opportunity for ongoing follow-up with clients.</li> </ul>
<b>Limitations</b>	<p>IRRC:</p> <ul style="list-style-type: none"> <li>• May not be appropriate for people who are not able to keep appointments (when IRRC is an ongoing intervention).</li> </ul>

**Effectiveness.** IRRC is an effective intervention for many target populations and both drug use and sexual risk behaviors, whether it is a brief single encounter, an extended more intensive encounter, or more than one encounter. Multiple encounters are more likely to result in behavior change. For example, (Des Jarlais, 1995) reported reductions in injection drug use risk behavior as a result of IRRC, with both a short basic knowledge intervention and an enhanced knowledge plus counseling intervention. (Branson et al., 1998) reported increased condom use and decreased number of partners among STD clinic patients receiving IRRC. A study by (Kamb et al., 1998) demonstrated an increase in 100% condom use and reduced

repeat STD infections among heterosexual adolescent and adult STD clinic patients with both an enhanced and brief IRRC intervention compared with didactic instruction alone. Although no cost-effectiveness information for this particular intervention was found in the literature, (Kahn, 1995) reports on one study that found an extended counseling intervention for IDUs to be cost-effective.

**Evaluation.** Expected outcomes for IRRC depend on the number of encounters. One-time IRRC encounters may affect knowledge, attitudes, and behavioral intention, but do not allow for assessing behavior change over time. Evaluation of effectiveness for these one-time

sessions should include at least a post-test. If it is anticipated that the individual might participate in another session at a later date, a pre-test should also be given. Individuals who participate in more than one IRRS session, depending on frequency of sessions and how far apart they occur, may demonstrate changes in HIV risk behavior over time, such as increased condom use, decreased number of partners, decreased needle sharing, and increased use of

sterilized needles. Evaluation of the effectiveness of multiple IRRS sessions should include a pre-test given at the beginning of the first session and a post-test given at the end of the final session (or after each session if it is undetermined how many sessions the individual will complete) to monitor behavior change. Ideally, a follow-up post-test should be given one month or longer after completion of the intervention, but this is not always possible.



<b>COUNSELING, TESTING, REFERRAL AND PARTNER COUNSELING AND REFERRAL SERVICES (CTR/PCRS)</b>	
<b>Definition/Description</b>	<p><u>CTR</u>: Counseling and testing is a series of personalized, client-centered encounters in which an individual can learn her/his serostatus as well as obtain tools to assess her/his own risk. CTR may include helping clients initiate and sustain behavior changes that decrease risk for HIV and giving referrals and information relevant to clients' needs.</p> <p><u>PCRS</u>: Once known as "partner notification," PCRS refers to "the range of services available to HIV-infected persons, their partners, and affected communities" once a person has accessed counseling and testing services. (Centers for Disease Control and Prevention, 1998b) PCRS contains an elicitation component (i.e., asking for partners' names) and a notification component (i.e., notifying partners of their risk).</p>
<b>Implementation Recommendations</b>	<p>See <a href="http://hivinsite.ucsf.edu/topics/testing_and_hiv_surveillance/">http://hivinsite.ucsf.edu/topics/testing_and_hiv_surveillance/</a> for links to several guidelines and recommendations.</p> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Implementation Requirements</b>	<ul style="list-style-type: none"> <li>• See CDC's HIV Counseling, Testing, and Referral Standards and Guidelines (Centers for Disease Control and Prevention, 1994): <a href="http://www.cdc.gov/hiv/pubs/hivctsr.pdf">http://www.cdc.gov/hiv/pubs/hivctsr.pdf</a></li> <li>• See CDC's HIV Partner Counseling and Referral Services Guidance (Centers for Disease Control and Prevention, 1998b): <a href="http://www.cdc.gov/hiv/pubs/pcrs.pdf">http://www.cdc.gov/hiv/pubs/pcrs.pdf</a></li> <li>• See California State Office of AIDS HIV Counseling and Testing Guidelines - Policies and Recommendations 1997.</li> <li>• See California State Office of AIDS HIV Partner Counseling and Referral Services - Standards and Recommendations 2000.</li> <li>• See SFPDHS AIDS Office, HIV Prevention Services, HIV Counseling Testing and Referral and Partner Notification, Unit of Service Documentation, Policies and Guidelines.</li> </ul>
<b>CTR Strengths</b>	<p><u>CTR</u>:</p> <ul style="list-style-type: none"> <li>• Is suitable for all populations, although different groups may be reached through anonymous versus confidential testing or through different testing venues.</li> <li>• Can be very inclusive when a provider offers anonymous, confidential, appointment-based, and drop-in services.</li> <li>• Can be provided by both HIV/AIDS prevention providers and primary care facilities.</li> <li>• Can be mobile, and thus can reach large numbers of people.</li> </ul> <p><u>Confidential CTR services</u>:</p> <ul style="list-style-type: none"> <li>• Expand the possibilities for follow-up and case management of the testing client.</li> </ul> <p><u>Anonymous CTR services</u>:</p> <ul style="list-style-type: none"> <li>• Serve the needs of clients who do not want their name or identifying information on record.</li> </ul>
<b>CTR Limitations</b>	<p><u>CTR</u>:</p> <ul style="list-style-type: none"> <li>• Requires referral to additional risk reduction services to maximize its effectiveness.</li> <li>• May have fewer benefits for people who are isolated or lack social support or for people in an early stage of recovery from substance abuse (although CTR can become part of the recovery process).</li> <li>• Offered at an HIV/AIDS provider may not be appropriate for communities in which there is stigma attached to HIV.</li> </ul>

<b>COUNSELING, TESTING, REFERRAL AND PARTNER COUNSELING AND REFERRAL SERVICES (CTR/PCRS) (CONT'D)</b>	
<b>PCRS Strengths</b>	<p>PCRS:</p> <ul style="list-style-type: none"> <li>• Is generally applicable for anyone wishing to inform partners of their positive HIV status and is especially valuable for clients wishing to notify a partner who is not currently in their life or who may have a violent or abusive reaction to hearing the news directly from the client.</li> <li>• May be the only means by which some people learn of their increased risk.</li> <li>• Can be done by the service provider alone or jointly by the service provider and the client, depending on client preference.</li> <li>• Is always an in-person service, allowing for on-the-spot counseling, testing, and referrals.</li> </ul>
<b>PCRS Limitations</b>	<p>PCRS:</p> <ul style="list-style-type: none"> <li>• Can only reach those partners voluntarily mentioned by the testing client who wish to use this service.</li> </ul>

**Effectiveness.** HIV counseling and testing is an effective intervention in many ways and is even more effective when clients are referred to additional risk reduction services (e.g., (St Lawrence et al., 1998)). Therefore, making appropriate referrals is key to increasing the efficacy of this intervention. CTR has been associated with reductions in sexual and drug use HIV risk behavior in several studies and with reductions in transmission among serodiscordant couples (Choi and Coates, 1994). In another study, IDUs notified of a positive test result were subsequently more likely to use condoms and less likely to be sexually active compared with those receiving negative test results (Colon et al., 1996). A study by (Roffman et al., 1995) found that men who had been tested tended to be more sexually active and more likely to have sex with multiple partners, but also engaged in more protected and low-risk sexual activities than men who were not tested. Regarding PCRS, provider referral notification and confidential testing appear to be most effective for reaching the partners of those test-

ed. Provider-referral notification of partners was more successful than the patient-referral in three studies (Hoffman et al., 1995; Landis et al., 1992; Spencer et al., 1993), and confidential test sites were 30%-50% more likely than anonymous test sites in one study to have notified and counseled the partners of HIV-positive clients (Hoffman et al., 1995). CTR/PCRS may be a very cost-effective intervention (Varghese et al., 1999), especially when targeted to high-risk populations (Nahmias and Feinstein, 1990), but it depends on a number of factors, including prevalence and likelihood that an HIV-negative test result may lead to increased risk behavior.

**Evaluation.** CTR/PCRS may be composed of up to three encounters; therefore, risk reduction and harm reduction behavior change goals can be established as necessary at the first session and progress toward them assessed with post-tests given at the disclosure and/or post-disclosure sessions. For repeat testers, post-tests can measure behavior change since last test.

<b>NEEDLE EXCHANGE</b>	
<b>Definition/Description</b>	Needle exchange programs are community or street-based programs that provide sterile needles to IDUs and hormone, steroid, vitamin, and insulin users. Needle exchange can be primary (i.e., individuals exchange their own needles) or secondary (i.e., individuals exchange needles for friends or a group of people).
<b>Implementation Recommendations</b>	<p>Needle exchange sites should:</p> <ul style="list-style-type: none"> <li>• Be adequately staffed and provide safer injection supplies.</li> <li>• Have a designated health education and referral and resource person.</li> <li>• Offer passes that reserve spots in drug treatment programs (i.e., drug treatment vouchers) to interested clients, when possible.</li> <li>• Have available condoms, dental dams, and information on safer sexual behavior.</li> <li>• Meet the safety needs of clients (e.g., minimizing police presence, having a protective and vigilant staff).</li> </ul> <p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Consider collaborating with other HIV prevention education agencies to provide services at the needle exchange site.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>Needle exchange programs:</p> <ul style="list-style-type: none"> <li>• Can be developed for a particular neighborhood.</li> <li>• Can provide a bridge to drug treatment, CTR/PCRS, hepatitis C screening, and other social and medical services.</li> <li>• Can be useful for the transgender community, and for other people who inject steroids or vitamins, as well as for IDUs.</li> <li>• May be more appropriate than pharmaceutical outlets for higher-risk populations who may require ancillary services and other prevention tools.</li> <li>• Can reduce transmission of hepatitis B and C as well as HIV.</li> </ul>
<b>Limitations</b>	<p>IDUs:</p> <ul style="list-style-type: none"> <li>• Do not always know how to access needle exchange because they do not know the schedule or where to go.</li> <li>• May not always consider needle exchange sites to be safe because they fear that law enforcement officials or social service authorities will intercept them there.</li> <li>• May fear that their children will be taken from them if they participate in needle exchange.</li> </ul> <p>Needle exchange:</p> <ul style="list-style-type: none"> <li>• Is inappropriate in the context of a 24-hour residential treatment program and may not be appropriate for clients in other kinds of drug treatment programs.</li> <li>• Cannot be funded with federal funds at the present time.</li> </ul>

**Effectiveness.** Needle exchange is clearly an effective intervention (CDC, 2000). Several studies have found use of needle exchange to be associated with reduced needle sharing and other injection-related risk reduction behaviors (Guydish et al., 1995; Hagan et al., 1991; Watters et al., 1994) as well as reduced HIV transmission (Heimer et al., undated manu-

script). A review of the literature, including government reports, overwhelmingly supports the effectiveness of needle exchange (Vlahov and Junge, 1998). Two studies indicate that it is a cost-effective approach in terms of infections averted (Holtgrave et al., 1998; Lurie et al., 1998).

**Evaluation.** In the case of needle exchange, it may be difficult to measure behavioral or other outcomes resulting from the intervention because needle exchange encounters do not always allow for follow-up to track behavior change over time. Therefore, needle exchange

may be best evaluated through process objectives. Such objectives may focus on number of contacts made, percent of contacts who are repeat users of needle exchange, number of needles/bleach kits distributed, or number of referrals to drug treatment given.



## HOTLINE

<b>Definition/ Description</b>	A hotline is a confidential telephone service functioning as an education/referral/help line for anonymous callers. Hotlines offer up-to-the-minute information on HIV and related issues, crisis intervention and counseling, and direction to other social services, as appropriate to client need.
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Develop consistent prevention messages for hotline operators and that are also consistent with messages disseminated by other organizations.</li> </ul> <p>Hotline operators should:</p> <ul style="list-style-type: none"> <li>• Promote and reinforce help-seeking behaviors.</li> <li>• Provide brief call documentation (records of call content and the demographic positioning of callers, for example).</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Public Information: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>Hotlines:</p> <ul style="list-style-type: none"> <li>• Are widely applicable to all groups at risk for HIV and are particularly appropriate for people desiring anonymity, people in crisis, people needing basic information and answers, and people whose needs are not addressed by mass media HIV education efforts.</li> <li>• Target a wider geographical area than most interventions and thus can reach more diverse and isolated populations.</li> <li>• Are often a first link to prevention and care services.</li> <li>• Serve preventive as well as destigmatizing functions.</li> </ul>
<b>Limitations</b>	<p>Hotlines:</p> <ul style="list-style-type: none"> <li>• May have limited usefulness in directly promoting behavior change.</li> <li>• Can be expensive to operate.</li> <li>• Are not appropriate for people without access to telephones.</li> <li>• Cannot reach people who do not comfortably speak the language(s) offered.</li> </ul>

**Effectiveness.** Hotlines are an effective method for disseminating accurate information about HIV, a critical component of HIV prevention (Kalichman and Belcher, 1997), but it is unclear to what extent they are linked to behavior change. One survey of repeat callers to the Southern California AIDS Hotline found that 50% percent of callers reported that they had increased their practice of safer sex, and for 72% of all callers the hotline had been the only source of HIV/AIDS information since their last call (AIDS Project Los Angeles, 1993). One study looking at reasons people called a hotline indicated that many people called because of fears related to actual risk behaviors they had

engaged in, indicating that this may be a good source of prevention information for some individuals (Kalichman and Belcher, 1997). No data on cost-effectiveness was found in the literature.

**Evaluation.** It would be extremely difficult to evaluate the impact of a hotline on people's knowledge, attitudes, or behavior without conducting an expensive well-controlled study. Therefore, hotline providers in San Francisco may best focus their evaluation efforts on process evaluation. Process objectives may focus on number and content of calls.

<b>POST-EXPOSURE PROPHYLAXIS, OR POST-EXPOSURE PREVENTION (PEP)</b>	
<b>Definition/Description</b>	This intervention consists of administering antiretroviral drugs to a person within 72 hours after they have been exposed or potentially exposed to HIV. Its use has been studied primarily among health care workers exposed to HIV in the context of their work. Its use in those exposed to HIV through sex, needle use, or other means has been less studied.
<b>Implementation Recommendations</b>	<p>PEP interventions:</p> <ul style="list-style-type: none"> <li>• Should include repeat HIV testing 3 months after receiving PEP</li> <li>• Should establish criteria for the types of exposures for which PEP will be offered.</li> </ul> <p>See also: 1. Public Health Service considerations and recommendations for sexual, injection drug use, or other nonoccupational exposure to HIV (Public Health Service, 1998a): <a href="http://hivinsite.ucsf.edu/medical/tx_guidelines/2098.3e58.html">http://hivinsite.ucsf.edu/medical/tx_guidelines/2098.3e58.html</a>; 2. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Implementation Requirements</b>	See Public Health Service guidelines for occupational exposure (Public Health Service, 1998b): <a href="http://hivinsite.ucsf.edu/medical/tx_guidelines/2098.3bb2.html">http://hivinsite.ucsf.edu/medical/tx_guidelines/2098.3bb2.html</a>
<b>Strengths</b>	<p>PEP:</p> <ul style="list-style-type: none"> <li>• For sexual exposure to HIV has been favorably received by gay and bisexual men, especially those at highest risk (Kalichman, 1998).</li> <li>• Is used by those exposed through sexual means when made available (Kahn et al., 2001).</li> <li>• Provides opportunities for risk reduction counseling.</li> </ul>
<b>Limitations</b>	<p>PEP:</p> <ul style="list-style-type: none"> <li>• May act as a deterrent to risk reduction among high-risk populations if made widely available (Kahn et al., 2001).</li> <li>• Is associated with many logistical and ethical issues that remain unresolved (e.g., who should administer PEP, who is eligible for PEP, how many times can a person get PEP).</li> <li>• May not be as accessible to those exposed through injection drug use-related behaviors (Kahn et al., 2001).</li> <li>• May have long-term effects that are as of yet unknown.</li> </ul>

**Effectiveness.** PEP has been shown to reduce the risk of HIV infection among exposed health care workers by 81% (Cardo et al., 1997). In addition, one recent study in San Francisco has documented the feasibility of PEP for nonoccupational exposure (Kahn et al., 2001). Of the 300 individuals receiving PEP for sexual exposure or exposure related to injection drug use and who returned six months later for an HIV test, none seroconverted. However, this is not conclusive evidence supporting PEP's effectiveness for nonoccupational exposure, because there was no comparison group and not all of the exposures were to HIV-positive individuals (i.e., many were of unknown serostatus). Regarding cost-effectiveness, PEP is most cost-

effective for occupational exposure when targeted to those exposed to known HIV-positive sources and those with severe exposures (Marin et al., 1999). For sexual exposure, assuming its efficacy, PEP is considered cost-effective only for individuals who report receptive anal intercourse with a partner of unknown serostatus (Pinkerton et al., 1998).

**Evaluation.** Evaluation of this intervention should focus at least on process objectives, such as how many received PEP and what was the event or the risk behavior that motivated them to seek PEP. In addition, a pre-test in the form of a risk behavior assessment could be done at the time of PEP as the basis for appro-

priate risk reduction counseling. If possible, the individual should receive one or more follow-up post-tests assessing behavior change one week, three months, and six months after receiving

PEP. Individuals should also be offered follow-up HIV testing and seroconversions after receipt of PEP should be documented.

<b>STD DETECTION AND TREATMENT</b>	
<b>Definition/Description</b>	STD detection and treatment refers to any intervention in which an individual receives testing and/or treatment for STDs, including but not limited to chlamydia, gonorrhea, syphilis, and herpes (either vaginally, anally, or orally). This is both a primary prevention strategy for HIV-positive and negative individuals (people are more susceptible to acquiring or transmitting HIV if they have an STD) and a secondary prevention strategy for HIV-positive individuals (HIV-positive people may be more susceptible to HIV reinfection when they have an STD and STDs may have more severe consequences for people with compromised immune systems).
<b>Implementation Recommendations</b>	<p>STD detection and treatment encounters:</p> <ul style="list-style-type: none"> <li>• Should include HIV counseling and testing or referrals to HIV counseling and testing.</li> <li>• Should include client-centered risk assessment and risk reduction counseling.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Implementation Requirements</b>	See CDC's STD treatment guidelines (Centers for Disease Control and Prevention, 1998a), click on Treatment Guidelines: <a href="http://www.cdc.gov/nchstp/std/dstdp.html">http://www.cdc.gov/nchstp/std/dstdp.html</a>
<b>Strengths</b>	<p>STD detection and treatment:</p> <ul style="list-style-type: none"> <li>• Can serve as a bridge to HIV counseling and testing.</li> <li>• May increase a person's perception of their own HIV risk if they are found to have an STD.</li> <li>• Can be done in street-based locations.</li> <li>• Can use new screening technologies.</li> </ul>
<b>Limitations</b>	<p>STD detection and treatment:</p> <ul style="list-style-type: none"> <li>• Is not sufficient for ensuring that all individuals will get an HIV test after being tested for STDs.</li> <li>• Will not reach people who do not get regular STD screening, those who do not have access to regular medical care, or those who do not have any symptoms and therefore do not seek screening (unless the intervention is mobile).</li> </ul>

**Effectiveness.** Studies have shown STD detection and treatment to be an effective tool for HIV prevention in two ways: (1) STD treatment reduces an individual's ability to transmit or acquire HIV and (2) STD treatment reduces the spread of HIV infection in communities (Centers for Disease Control and Prevention, 1998c), [http://www.cdc.gov/nchstp/std/Fact\\_Sheets/facts\\_std\\_testing\\_and\\_treatment.htm](http://www.cdc.gov/nchstp/std/Fact_Sheets/facts_std_testing_and_treatment.htm)). Studies indicate that continuous interventions that focus on increasing access to STD services are likely more effective than intermittent interventions (e.g., periodic waves of community-wide, non-targeted detection and treatment) (Centers for Disease Control and Prevention, 1998c). It is also most effective in

reducing HIV transmission in areas where STD rates are high (Centers for Disease Control and Prevention, 1998c). Treatment of symptomatic STDs in particular is a critical component of an effective STD detection and treatment program (Centers for Disease Control and Prevention, 1998c). No information on cost-effectiveness was found in the literature.

**Evaluation.** Evaluation of this intervention should focus at a minimum on process objectives, such as how many received STD screening, what percent were found to have an STD, which STDs were detected, and how many referrals to HIV counseling and testing were given.



## SMALL GROUP INTERVENTIONS



**Small Group Interventions.** Small group interventions involve the delivery of prevention services to a group of three or more individuals. Interaction among the members of the group is a central component of the intervention.

<b>SINGLE SESSION GROUPS (SSGs)</b>	
<b>Definition/Description</b>	An SSG is a one-time intensive session that focuses on information about HIV (e.g., transmission and behavior change), motivational activities, and skills-building. It may also touch on other relevant issues specific to the target population. This intervention may be implemented as planned groups, impromptu groups, a mobile intervention using vans as session sites, or before/after bar groups.
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Advertise or promote the availability of the service.</li> <li>• Recruit participants via other (not directly HIV-related) activities.</li> <li>• Provide additional support, follow-up groups, and/or "booster" groups.</li> </ul> <p>SSGs should:</p> <ul style="list-style-type: none"> <li>• Include ground rules created and adopted by participants.</li> <li>• Include discussions about multiple issues (e.g., racism, homophobia).</li> </ul> <p>SSG facilitators should:</p> <ul style="list-style-type: none"> <li>• Be available before or after the intervention to provide confidential, one-on-one referrals to other prevention services within or outside of the agency.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Individual and Group Interventions: <a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>SSGs:</p> <ul style="list-style-type: none"> <li>• May provide access to populations who cannot commit to multiple sessions.</li> <li>• Can be run as one-time skills-building workshops.</li> <li>• Can recruit clients for other prevention-oriented activities.</li> <li>• Can be designed specifically to educate people who might become educators or advocates themselves.</li> </ul>
<b>Limitations</b>	<p>SSGs:</p> <ul style="list-style-type: none"> <li>• Are not as effective as MSW at changing HIV risk behavior.</li> <li>• Are less helpful for people with serious mental health issues, for the highest-risk populations, and for those most in denial about their risk.</li> </ul>

**Effectiveness.** A number of studies have shown that SSGs can be effective at reducing sexual risk behavior in many different populations. African-American male adolescents in Philadelphia reported engaging in less risky sexual behavior in the three months following a SSG intervention (Jemmott et al., 1992). Two one-day peer-led interventions for gay and bisexual men in Philadelphia increased condom use for insertive anal sex, although neither had

an effect on receptive anal sex (Valdiserri et al., 1989). One-time group counseling sessions among gay Asian/Pacific Islander men in San Francisco were effective at reducing number of sexual partners, and Chinese and Filipino men reported reduced unprotected anal sex (Choi et al., 1996). Finally, reduced likelihood of unprotected sex was documented for adolescents participating in a SSG (Kennedy et al., 2000a).

**Evaluation.** Because SSGs are often one-time encounters, it is not usually feasible to measure behavior change over time. However, the effects of a SSG on behavioral intentions may be measured. A post-test should be adminis-

tered at the end of a workshop. Ideally, a follow-up post-test should be given one or more months after the workshop to measure behavior change, but this is not always possible.

<b>MULTIPLE SESSION WORKSHOP (MSW)</b>	
<b>Definition/Description</b>	<p>A MSW is a series of groups or meetings that introduce HIV issues and link them to other life issues not as easily or immediately understood as relating to HIV. Each workshop in the series is attended by the same individuals, which is different from a series of SSGs where different groups of people attend each session. Workshop topics usually build on each other from session to session. Groups may be closed or drop-in, mixed or serostatus-specific, structured, or need/issue-driven groups for risk reduction and psychosocial support. Groups can be held in vans, run as before/after bar groups, or be held in other community settings.</p>
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Provide additional support, follow-up groups, and/or "booster" groups.</li> <li>• Make counselors available for follow-up, especially at six months, to evaluate the adoption and/or maintenance of safer behaviors.</li> <li>• Recruit participants via other (not directly HIV-related) activities.</li> </ul> <p>MSWs should:</p> <ul style="list-style-type: none"> <li>• Include ground rules created and adopted by participants.</li> <li>• Include discussions about multiple issues that the group identifies as priorities (e.g., racism, homophobia).</li> </ul> <p>MSW facilitators should:</p> <ul style="list-style-type: none"> <li>• Be available before or after the intervention to provide confidential, one-on-one referrals to other prevention services within or outside of the agency.</li> </ul> <p>See also: 1. CDC's Guidelines for Health Education and Risk Reduction Activities (Centers for Disease Control and Prevention, 1995) under Individual and Group Interventions:<a href="http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm">http://aepo-xdv-www.epo.cdc.gov/wonder/prevguid/p0000389/p0000389.htm</a>; 2. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>MSWs:</p> <ul style="list-style-type: none"> <li>• Go into greater depth about HIV risk reduction issues and strategies than SSGs, have more potential to deal with the underlying causes of unsafe behavior, and thus have a greater possibility of effecting behavior change.</li> <li>• Can attract MSMs who are seeking social contacts and support outside of the gay bar scene and people who are seeking connection with others who have shared experiences and interests.</li> <li>• Are suitable for people with high perception of personal risk, people who are already highly motivated to attend groups, people who desire structure (e.g., some homeless and/or jobless people), and people who can commit to attending sessions on an ongoing basis.</li> <li>• Can be the first opportunity for some people to talk about sexual and drug-related behaviors with their peers.</li> <li>• Are especially feasible to conduct in institutional settings (e.g., schools, treatment centers, prisons/jails).</li> </ul>
<b>Limitations</b>	<p>MSWs:</p> <ul style="list-style-type: none"> <li>• May be utilized more fully by women, who tend to take advantage of discussion and support groups and to work well with relational models.</li> <li>• May not be as effective or appropriate for mentally ill populations or people with limited free time (e.g., people who are struggling to hold onto housing/employment or juggling house, kids, education, work).</li> <li>• May pose challenges regarding retention.</li> </ul>

**Effectiveness.** MSWs have been effective at reducing a variety sexual risk taking behaviors as well as affecting knowledge and attitudes about HIV among several populations, including homeless adolescents (Rotheram-Borus et al., 1991), African-American gay and bisexual men in San Francisco (Peterson, 1993), gay and bisexual men in general (Roffman et al., 1998), young African-American women (DiClemente and Wingwood, 1995), low-income African-American women (Carey et al., 2000), incarcerated African-American and White women (St Lawrence et al., 1997), STD clinic patients (Branson et al., 1998), immigrant Latina women (Gomez et al., 1999), and middle school students (Levy et al., 1995), especially when compared with SSGs. One recent study of the effect

of MSWs with incarcerated adolescents did not identify any commitment to behavior change among the participants after completion of the intervention (Schlapman and Cass, 2000).

**Evaluation.** MSWs can be expected to result in behavior change over time, in areas such as condom use or needle sharing. A pre-test should be given at the start of the first workshop and a post-test given at the end of the final workshop. Ideally, an additional post-test would also be given during a follow-up encounter with each client, one or more months after the end of the intervention; however, this is not always possible.



## COMMUNITY LEVEL INTERVENTIONS



### Community-Level Interventions.

Community-level interventions take a systems approach, by addressing the social networks and social norms that influence people's knowledge, attitudes, beliefs, skills, and behaviors. These interventions attempt to change specific behaviors on a group level, as opposed to an individ-

ual level, by using social networks to disseminate HIV prevention risk reduction messages. Because changing social environments takes time, the results of community-level interventions do not happen overnight, but over the course of months and years.

<b>MEDIA</b>	
<b>Definition/Description</b>	Media is a form of communication that attempts to reach a wide audience with motivational and educational messages. These messages can be designed to reach large geographically dispersed audiences, small and location-specific audiences, or audiences defined by a common cultural or community identity. Examples of types of media are television (e.g., documentaries, talk shows, commercials, public service announcements [PSAs]), radio (e.g., PSAs, public talk shows), print (e.g., newspapers, magazines, newsletters), billboard advertising, computer services (e.g., Internet, bulletin boards), telephone services (e.g., hotlines, talk lines), brochures, pamphlets, fact sheets, posters, palm cards, videos, and audio tapes.
<b>Implementation Recommendations</b>	<p>Agencies should:</p> <ul style="list-style-type: none"> <li>• Involve community members in the design, planning, and implementation of a media campaign to ensure that the effort is relevant to the target populations.</li> <li>• Integrate HIV messages with other issues and activities of the target group.</li> <li>• Use the social marketing theory/strategy as the foundation for media efforts.</li> </ul> <p>Media campaigns should:</p> <ul style="list-style-type: none"> <li>• Be emotionally or intellectually engaging.</li> <li>• Be designed to target a specific group and not the general population, although the message may need to be disseminated widely to ensure that it reaches the target population.</li> <li>• Be designed to target populations according to what stage of the Stages of Changes Model the target population is in.</li> </ul> <p>See also: 1. Strategies section of this chapter under Social Marketing; 2. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p>Media interventions:</p> <ul style="list-style-type: none"> <li>• Are generally appropriate for all audiences and can be tailored for the target audience.</li> <li>• Are suitable for reaching groups with little to no previous awareness or concern about HIV, groups that are less likely to seek out or have easy access to HIV-related information (e.g., homeless individuals, IDUs, lower-literacy groups, people unable to afford a television or radio), and people who do not perceive themselves to be at risk (e.g., those in denial)</li> <li>• Can be very affordable when they are small-scale and targeted.</li> <li>• Can motivate people on a group/community level.</li> </ul>
<b>Limitations</b>	<p>Media interventions:</p> <ul style="list-style-type: none"> <li>• Can cause confusion when the messages are changing or inconsistent (e.g., regarding the safety of oral sex).</li> </ul>

**MEDIA (CONT'D)****Limitations**

- Must communicate strong messages without causing desensitization.
  - Are more useful when combined with interpersonal interventions.
- Mass media interventions:
- May not be as effective for groups facing multiple issues and barriers to behavior change.
  - Can be expensive.

**Effectiveness.** In a world where many of our perceptions, attitudes, and beliefs are influenced by the media, use of media can be an effective method for increasing knowledge and awareness of HIV/AIDS (Schechtel et al., 1995) and for influencing community norms related to HIV risk behavior. It may also play a role in changing individuals' behavior, such as increasing HIV testing and condom use (Schechtel et al., 1995). Other studies have identified specific channels and populations for whom media interventions can be effective. One study found that television was an effective means to reach IDUS (Jason et al., 1993) and another study (Romer and Kim, 1995) posited that the use of local mass media can be particularly effective at decreasing risk behavior among poor, urban

African-American and Latino/Latina youth. (See also Effectiveness of Social Marketing in the Strategies section of this chapter.)

**Evaluation.** Some media campaigns may be evaluated on a community level, looking at HIV prevention indicators and how they change over the period of the campaign. Providers are not expected to conduct this type of evaluation. A more feasible way to evaluate media campaigns may be through a one-time community-based survey that asks members of the target population if they have seen the advertisement or other media, where they saw it, how many times they saw it, and what effect it had on their knowledge, attitudes, beliefs, or behavior.

<b>VENUE-BASED GROUP OUTREACH (VBGO)</b>	
<b>Definition/Description</b>	With VBGO, providers conduct face-to-face HIV prevention activities in community settings (e.g., street corners, public forums, speakers' bureaus), in commercial settings (e.g., bars, sex clubs, concert halls, theaters), or at public events (e.g., street fairs, parades). The outreach activities may occur in existing settings or settings specially created for the purpose of HIV prevention. VBGO can take a variety of forms, including community theater, dramatizations of real-life scenarios, "bar zaps," and interactive performance art, that are designed to promote HIV risk reduction behaviors among audience members. The distribution of appropriate prevention materials may also be a component of these activities. VBGO should aim to change community norms by reaching large numbers of people.
<b>Implementation Recommendations</b>	<p>Outreach activities and events should:</p> <ul style="list-style-type: none"> <li>• Respect the operating conditions at, and contribute to the spirit of the venue/event.</li> <li>• Be interactive and engaging.</li> <li>• Emphasize community unity, creating a positive environment in which participants can socialize and mingle.</li> <li>• Encourage networking among members of different communities, through sharing of information and resources.</li> <li>• Be held in a safe environment for the target audience.</li> <li>• Provide an opportunity for confidential, one-on-one referrals to other prevention services within or outside of the agency before or after the intervention.</li> </ul> <p>See also: 1. General Recommendations section in this chapter, pp. 123-127.</p>
<b>Strengths</b>	<p><b>VBGO:</b></p> <ul style="list-style-type: none"> <li>• Can reach people who identify with some community and/or a group scene/social group.</li> <li>• Is suitable for groups with multiple issues and barriers to change, groups with a lack of access to services, people with a low perception of personal or communal risk, people needing basic information and referrals, and people that have never experienced another intervention.</li> <li>• Can provide a forum for dialogue between friends and family (community-building).</li> <li>• Can encourage individuals and communities to participate in other prevention activities</li> <li>• Can address people at various stages of change.</li> </ul> <p><b>Street theater:</b></p> <ul style="list-style-type: none"> <li>• Can reach people who may be in a venue less purposefully and may not be seeking HIV prevention services.</li> </ul>
<b>Limitations</b>	<p><b>VBGO:</b></p> <ul style="list-style-type: none"> <li>• May not be as effective for reaching people who are closeted, not identified with a group/community, or not already in an institutional setting.</li> </ul>

**Effectiveness.** VBGO has been found to be an effective intervention for reaching certain target populations that might not otherwise have access to HIV prevention, and it may have effects on knowledge, attitudes, or behavioral intention. In one study, group presentations

provided to lesbian and bisexual women in bars and clubs in San Francisco were "effective in prompting interest in HIV prevention information and intent to change behavior" (Stephens, 1994). In addition, VBGO was found to be the most effective approach for reaching high-risk

young gay men compared with small group workshops (Kegeles et al., 1996).

**Evaluation.** VBGO is probably best evaluated at the community level, since the goal is to change community norms. However, if this is

not feasible, evaluation should include measurement of process objectives at a minimum. Such objectives may focus on number of contacts made, number and type of prevention materials distributed, and number and type of referrals given.



## Chapter 6

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# STRATEGIC EVALUATION: DETERMINING THE SUCCESS OF HIV PREVENTION EFFORTS



## CHAPTER OVERVIEW

**Section I: Introduction** reviews San Francisco's collaborative approach to, and philosophy about, evaluation and introduces the reader to common evaluation terms and definitions.

**Section II: Information for Providers** describes the HPPC's evaluation and data collection expectations for agencies providing HIV prevention services.

**Section III: Information for Researchers** describes the HPPC's evaluation and data collection expectations for HIV prevention researchers in the areas of outcome evaluation, surveillance, and collaboration with communities.

**Section IV: Evaluation of the Community Planning Process** discusses how San Francisco evaluates HPPC processes and continually works toward improving the functioning of the Council.

**Appendix 1** outlines CDC's requirements for data collection.

## Section I: INTRODUCTION

### EVALUATION RATIONALE AND PHILOSOPHY

The rationale underlying the HPPC's commitment to evaluation consists of four points about its benefits to individual programs and the prevention system as a whole.

- 1. Evaluation is a critical tool in reducing the transmission of HIV.** The information gleaned from evaluation of individual programs and large-scale evaluation research is used to (1) determine whether individual HIV prevention programs are working; (2) improve the design and implementation of programs; (3) inform front-line workers and managers how to improve their work; (4) ascertain which interventions reduce different risk behaviors in different populations; and (5) identify gaps in services. These five benefits of evaluation all facilitate the goal of eliminating the transmission of HIV in San Francisco.
- 2. In this rapidly changing epidemic, evaluation is the only way to ensure that prevention efforts meet the changing needs of affected groups.** Evaluation of prevention efforts in San Francisco is critical in an era when the populations affected by HIV, treatment options, and prevention technologies are changing from year to year. Evaluation activities can (1) determine whether prevention programs are responding to consumer perceptions about issues such as HIV transmission, HIV "curability," and vaccine availability; (2) demonstrate whether prevention efforts are keeping pace with the changing epidemiologic distribution of HIV infection and risk behaviors in the city; and (3) show whether new, creative, and innovative programs are effective in the context of the changing epidemic.
- 3. Evaluation data can improve prevention planning and resource allocation.** In this period of dwindling resources, the HPPC and the HIV Prevention Section must become increasingly attentive to how resource allocation priorities are set. Evaluation results (1) demonstrate whether individual programs are reaching their target populations, meeting client needs, and are effective at reducing risk behaviors; (2) show which interventions work best in which popula-

tions; and (3) indicate trends in HIV infection and risk behavior over time at the city-wide level. Thus, evaluation can help HIV prevention planners make informed decisions about the most effective and efficient use of scarce funding and technical assistance resources.

- 4. Evaluation gives a voice to consumers of HIV prevention services.** Collecting information from those using services allows their perceptions and experiences to be heard by prevention providers, researchers, policy makers, and funders. Good evaluation (1) keeps in mind that consumers are the reason that prevention services and research exist and thus continually integrates the consumer voice into design, implementation, and analysis; and (2) considers consumer needs and perspectives when developing an evaluation design, a research protocol, or a research agenda. With this orientation to evaluation, HIV prevention efforts may continually be adapted to meet the needs and preferences of communities affected by HIV.

## **STRATEGIC EVALUATION FOR SAN FRANCISCO: A COLLABORATIVE APPROACH**

### **DEVELOPMENT OF THE STRATEGIC EVALUATION PLAN**

The Strategic Evaluation Committee felt that it was vital to incorporate the input of providers, researchers, and community members into the development of this four-year evaluation plan for San Francisco. To accomplish this goal, the Committee made a concerted effort at the beginning of the planning process to recruit non-HPPC members to the committee. The result was that providers, community members, and HIV Prevention Section Program Managers and Epidemiology Evaluation Section

researchers were all represented. To facilitate inclusion of various perspectives, other local researchers and stakeholders in evaluation, such as the Organizational Development/Technical Assistance (ODTA) team and Center for AIDS Prevention Studies (CAPS), gave input into the development of this Strategic Evaluation Plan.

## **PARTNERSHIPS IN EVALUATION**

### **Providers, Researchers, and Consumers**

This Strategic Evaluation chapter was written with two particular audiences in mind: (1) San Francisco HIV prevention providers (and those who work with providers, including Program Managers and technical assistance consultants), and (2) San Francisco evaluation researchers (including the SFDPH and academic researchers). This framework was chosen because these two groups are responsible for the implementation of evaluation activities in San Francisco.

An integral component of the four-year plan is the development of linkages and collaboration between providers and researchers, who have traditionally been separate entities, whereby (1) the input of prevention providers on the priorities and directions for evaluation research is incorporated into research activities, and (2) the results of evaluation research are used by providers to inform the development and refinement of their programs.

Although providers and researchers are the target audiences for this chapter, ultimately, it is the consumers of HIV prevention services who will be most affected by evaluation activities in San Francisco. Providers and researchers only exist because of consumers; their function is to serve populations affected by HIV. Therefore, it would be counterproductive to omit the voices of HIV-affected communities in the planning and implementation of evaluation activities and research, as well as in the use of evaluation



results. Without their voices, it would be impossible to develop appropriate and effective programs and research agendas. Therefore, how the consumer perspective is incorporated into research and evaluation is considered throughout all sections of this chapter.

### Other Partners in Evaluation

Although this chapter is directed primarily toward providers and researchers, a number of other groups have a stake in HIV prevention evaluation activities in San Francisco. Some of the stakeholders include:

- Consumers of HIV prevention services in San Francisco
- The HIV-affected community in San Francisco
- HIV prevention providers in San Francisco
- Academic research institutions, such as University of California, San Francisco (UCSF), CAPS, doing prevention research on San Francisco populations
- Centers for Disease Control and Prevention (CDC)
- State of California Office of AIDS
- HPPC
- SFDPH (evaluation researchers, epidemiologists, Program Managers, support staff to the HPPC, etc.)
- Consultants (contractors to HIV prevention providers, the HPPC, etc.)

It is critical that linkages, collaboration, communication, accountability, and feedback loops be developed among these stakeholders in order for HIV prevention evaluation to be successful in San Francisco. The goals and objectives in each section of this chapter are designed to facilitate this collaborative network, and they especially focus on strengthening the relationships among providers, researchers, consumers, the HPPC, and the HIV Prevention Section of SFDPH.

### Principles of Collaboration

The HPPC and SFDPH see San Francisco prevention providers, HIV prevention researchers, and others involved in the evaluation or provision of HIV prevention services as full partners in the creation and implementation of a multifaceted evaluation system. The HPPC and SFDPH share the following fundamental values as a starting point for collaborative efforts. The HPPC and SFDPH:

- Share a common understanding of behavioral science principles (see *Strategies and Interventions*, pp. 123-128)
- Share a belief that HIV causes AIDS and thus also share a commitment to reducing the spread of HIV
- Agree that the HIV-affected community today and tomorrow is the focus of and the reason for our work
- Share a commitment to our interdependence and a belief that we have something to learn from each other
- Support each other by sharing ideas, expertise, and resources and by communicating with each other about what is happening in HIV prevention in San Francisco
- Are accountable to each other for such support
- Consider published and unpublished literature on HIV prevention valuable tools for informing the development and improvement of interventions and research designs
- Encourage and support creativity and innovation in programming and data collection within the boundaries of credible evaluation

### TERMS AND DEFINITIONS

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There are numerous ways to evaluate HIV prevention activities, but the CDC mandates four specific types of evaluation for HIV prevention: (1) process evaluation, which evaluates individual HIV prevention programs, (2) outcome monitoring, which also evaluates individual HIV prevention programs, (3) outcome evaluation,

which evaluates the effectiveness of types of interventions, and (4) city-wide surveillance using prevention indicators, which evaluates the effects of HIV prevention efforts in the city as a whole. All are critical to improving HIV prevention efforts. Definitions for these types of evaluation are provided here as a foundation for understanding the implementation plans presented later in the chapter.

## PROCESS EVALUATION



**Process evaluation** tells providers what is actually happening, as opposed to what was planned. The data are then used to improve the delivery of HIV prevention interventions and programs.

Process evaluation addresses the following types of questions: How many people are being served? What are the demographics of the people being served? Is the intervention reaching its target population? Was the intervention implemented as planned? How was the intervention implemented? To conduct process evaluation, providers and SFPDPH collect and analyze data pertaining to individual client characteristics, the types of services provided, and the resources used to deliver services. Examples of process evaluation conducted by San Francisco providers include the SFPDPH-required demographic data and the Statistical Information Questionnaire (SIQ) required by the State of California Office of AIDS.

## OUTCOME MONITORING



**Outcome monitoring** tells providers what progress individual clients are making toward the objectives stated in the intervention. Outcome monitoring entails measuring change in behavior, to determine whether interventions are achieving their objectives.

Outcome monitoring cannot determine with certainty what is causing the behavior change; it might be the intervention, or it might be some other factor. Some providers conduct outcome monitoring by administering a short behavioral risk assessment (BRA) before and after the intervention is done, to see if there has been any behavior change.

## OUTCOME EVALUATION



**Outcome evaluation** determines whether a particular intervention is actually causing changes in knowledge, behavior, attitudes, or beliefs, as opposed to some other factor that may be contributing to the change.

Outcome evaluation uses a scientific research design, usually with a control group. An example of an outcome evaluation study being done in San Francisco is the Prevention Case Management (PCM) Outcome Evaluation Study.

## CITY-WIDE SURVEILLANCE USING PREVENTION INDICATORS



**Surveillance** is the ongoing process of collecting, analyzing, and interpreting data related to a disease on a large scale to provide a "big picture." A **prevention indicator** is a data element that points to trends in the HIV epidemic and provides information about where prevention efforts should be targeted.

For example, a prevention indicator for MSM is rectal gonorrhea. An increasing incidence of rectal gonorrhea among MSM may indicate an increase in unprotected anal sex, which is a risk factor for HIV transmission; therefore, prevention efforts among MSM may need to focus more on condom use during anal sex.

## Section II: INFORMATION FOR PROVIDERS

### DEVELOPMENT OF THE PLAN FOR PROVIDER-LEVEL EVALUATION

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In 2000 when this Plan was written, different funding agencies and planning groups (CDC, the State of California Office of AIDS, the San Francisco Health Commission, SFPDPH, HPPC) all require various types of data collection and evaluation. Providers often collect similar information multiple times to serve the needs of different funders. The underlying theme of this four-year evaluation plan, therefore, is to streamline and standardize the data collection processes. This will reduce redundancy while ensuring that all stakeholders' data and evaluation needs are being met.

The impetus for streamlining data collection was CDC's introduction of new process evaluation requirements for providers (summarized in Appendix 1). In December 1999, CDC issued a new Evaluation Guidance mandating that all jurisdictions collect specific process data elements for each intervention and for each risk population. The HPPC and SFPDPH were concerned that these new requirements would be a major burden for providers, especially since the CDC data elements must be collected on all clients. The HPPC and SFPDPH began to explore ways to eliminate unnecessary data collection requirements so that the new CDC requirements could be implemented. It soon became apparent that San Francisco providers are already collecting many of the data elements required by CDC, albeit in a nonstandardized way. Further, it became obvious that many of the data elements in the various instruments (e.g., the BRA, the outcome measure, the SIQ) were redundant. The SFPDPH and the HPPC saw a golden opportunity to overhaul San Francisco's approach to provider-level evaluation to make it more efficient and useful. The good news is that San Francisco providers are

already doing most of what they need to do in terms of data collection; the challenge lies in standardizing the instruments, systems, and processes across providers.

### GOALS FOR PROVIDER EVALUATION ACTIVITIES

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#### GOAL I

The overarching four-year provider-level evaluation goal for San Francisco is:

*A new standardized data collection and reporting system that includes process evaluation and outcome monitoring will be in use in San Francisco, and the data entered into this system will satisfy the data needs of San Francisco providers, SFPDPH, the State of California Office of AIDS, and the CDC.*

Streamlining and standardizing data will be time-consuming because it involves working closely with all parties involved, including providers, funders, and consumers. Successful implementation of merging multiple data collection processes into one integrated system will require patience, leadership, cooperation, and coordination. In the long run, however, multiple advantages will result:

- The burden of data collection on providers will ultimately be reduced.
- Data can be aggregated across agencies to provide a picture of what is going on in San Francisco as a whole.
- Aggregate data can be used for prevention planning and prioritization of populations and interventions.
- Data will be useful for all stakeholders (providers, HPPC, SFPDPH, the State of California Office of AIDS, CDC) because

each will have given input into the development of the data requirements.

- Providers will retain flexibility with the new system because it will support agency-specific evaluation needs.
- One data system will be created that satisfies all reporting requirements.

In addition, the new data system will contain several features that will improve the quality and utility of process monitoring and outcome evaluation data while protecting client anonymity:

### **1. The system will be Internet-based.**

- Providers and SFDPH will have access via passwords to a secure Internet site, where providers will enter their data periodically.
- Providers will be able to create standard or customized reports for their own purposes.
- SFDPH will be able to create reports that combine data from all agencies for the CDC, the State of California Office of AIDS, or other groups that request data, such as the Mayor's Office.

### **2. The system will protect clients.**

- For most interventions, a matching variable will be used instead of a unique identifier for each client entered into the system. The matching variable identifies an individual within the system when information about that person is entered more than once, but it cannot be traced back to a particular person. An example of a matching variable currently in use at a local HIV prevention provider is: last letter of last name, two-digit month of birth, two-digit day of birth, last two letters of the state or country of birth, and the last letter of the mother's maiden name. A matching variable might look something like this: E0225IAH. This particular matching variable might belong to John Doe, born 2/25/66 in California to Mrs. Smith, or it might belong to Jimmy Shoe, born 2/25/75 in Virginia to Mrs. Roth. Only this string of numbers and letters is entered into the system, and not the identifying information. Therefore, the system ensures client

anonymity.

- The system will be secure. Only selected SFDPH staff will have access to all information in the system. Agencies will have access only to their own data. Other groups may request data reports from SFDPH but will not have access to the system or to agency-specific data. All access will be strictly controlled with the latest technology.

### **3. The system will substantially reduce duplicated clients, providing solid data on the number and demographics of people served in San Francisco.**

- The matching variable will allow the data from individuals who receive services from more than one agency or who receive more than one intervention to be linked. Therefore, that person will not be counted more than once.
- In order to protect client anonymity, the matching variable will not uniquely identify a person. Some clients may have the same matching variable, as illustrated in point number 2. Therefore, the system will not completely eliminate duplicated clients.

### **4. The system will satisfy multiple data requirements.**

- The system will eventually contain all the provider-collected process and outcome data required by the HPPC, SFDPH, CDC, and the State of California Office of AIDS, including counseling, testing, referral and partner counseling and referral services (CTR/PCRS) data.

## **GOAL 2**

In order to ensure that the data in the new system are scientifically sound and that the data are being used to improve the delivery of HIV prevention programs, providers must be trained on the new system and its implications for data collection and evaluation. The four-year goal for provider-level process evaluation and outcome monitoring is:



*Providers will be proficient in the collection, entry, and analysis of standardized process evaluation and outcome monitoring data and in the use of these data to refine and improve their programs.*

presents a detailed timeline for these objectives. These objectives and time frames represent our best effort at detailing a plan that is reasonable and feasible. Progress toward the objectives will be regularly assessed and the time frames revised as necessary to reflect the progress made.

## OBJECTIVES, ACTIVITIES, AND TIMELINE

To accomplish these goals, several objectives must be met between 2000 and 2003. Exhibit 1

<b>EXHIBIT 1: PROVIDER EVALUATION OBJECTIVES AND ACTIVITIES FOR SAN FRANCISCO WITH TIMELINE</b>		
<b>Time Frame</b>	<b>Objectives and Activities</b>	<b>Group(s) Responsible for Implementation</b>
Year 1 (2000)	1. By December 2000, SFDPH-funded prevention providers will develop, measure, and analyze the results of one outcome objective for at least one intervention (nonstandardized), as already outlined in contracts	Providers, with technical assistance from OD/TA
	2. By December 2000, SFDPH will finalize the required standardized process evaluation and outcome monitoring data elements <ul style="list-style-type: none"> <li>• Hold forum with providers to discuss new CDC requirements and how they can be merged with existing requirements (August 29)</li> <li>• Hold forums with providers for each intervention type to get input on the development of the requirements for standardized process and outcome data collection (September - November)</li> </ul>	SFDPH  SFDPH, HPPC, OD/TA (providers required to participate) SFDPH, HPPC, OD/TA (providers required to participate)
Year 2 (2001)	1. By December 2001, SFDPH-funded prevention providers will develop, measure, and analyze the results of one outcome objective for at least one intervention (nonstandardized) and report results to SFDPH	Providers, with technical assistance from OD/TA
	2. By December 2001, SFDPH will put in place a secure Internet-based system for data entry, management, and reporting <ul style="list-style-type: none"> <li>• Develop the system (January - June)</li> <li>• Discuss and integrate security measures into the new system (January - June)</li> <li>• Assess provider capacity regarding computer technology (e.g., Internet access, staff computer skills, number of staff with computers) (January - June)</li> </ul>	SFDPH  SFDPH, consultants SFDPH, consultants  SFDPH, OD/TA

<b>EXHIBIT I (CONT'D): PROVIDER EVALUATION OBJECTIVES AND ACTIVITIES FOR SAN FRANCISCO WITH TIMELINE</b>		
<b>Time Frame</b>	<b>Objectives and Activities</b>	<b>Group(s) Responsible for Implementation</b>
Year 2 (2001) [cont'd]	<ul style="list-style-type: none"> <li>• Train providers on (1) interviewer skills, (2) data collection logistics, (3) data coding and entry, and (4) data analysis and reporting (July - December)</li> <li>• Pilot test the new data collection forms and the new Internet-based system with trained providers (July - December)</li> <li>• Refine the system (July - December)</li> </ul>	SFDPH, HPPC, OD/TA (providers required to participate) Providers, with assistance from SFDPH and OD/TA  SFDPH, consultants
	3. By December 2001, SFDPH will complete an assessment of all provider data collection requirements and have recommendations for further streamlining	SFDPH
	<ul style="list-style-type: none"> <li>• Work with the San Francisco Health Commission to develop a standardized client satisfaction survey to be administered by an outside group not affiliated with HIV prevention providers (January - December)</li> <li>• Work with the State of California Office of AIDS to incorporate the SIQ into the new data system (January - December)</li> </ul>	SFDPH  SFDPH
Year 3 (2002)	1. By December 2002, SFDPH will have one year's worth of standardized process evaluation and outcome monitoring data, as well as agency-specific data for the outcome objective, from all SFDPH-funded HIV prevention providers. Agencies will be using these data to improve and refine their programs	SFDPH
	<ul style="list-style-type: none"> <li>• Conduct post-pilot data collection (January - December)</li> <li>• Develop, measure, and analyze the results of one outcome objective for at least one intervention and possibly report results via new Internet-based system (January - December)</li> <li>• Train individual providers on how to use their data to improve their programs (January - December)</li> <li>• Produce annual evaluation report and present report and share ideas at Evaluation Meeting (described under Information for Researchers section of this chapter) (November)</li> </ul>	Providers, with technical assistance from OD/TA Providers  SFDPH, OD/TA SFDPH (providers required to participate)
	2. By December 2002, SFDPH will establish mechanisms for analyzing and reporting the data to other stakeholders	SFDPH
	<ul style="list-style-type: none"> <li>• Develop report formats for CDC, State, and other stakeholders (January - June)</li> <li>• Report data from January - March 2002 to CDC (April)</li> <li>• Report data from January - June 2002 to State (June)</li> </ul>	SFDPH SFDPH SFDPH

## EXHIBIT I (CONT'D): PROVIDER EVALUATION OBJECTIVES AND ACTIVITIES FOR SAN FRANCISCO WITH TIMELINE

<i>Time Frame</i>	<i>Objectives and Activities</i>	<i>Group(s) Responsible for Implementation</i>
Year 3 (2002) [cont'd]	3. By December 2002, SFDPH will complete additional streamlining of data collection with the San Francisco Health Commission and the State of California Office of AIDS (e.g., SIQ, client satisfaction)	SFDPH
Year 4 (2003)	1. By September 2003, SFDPH will institutionalize the new data collection and reporting system, such that providers, SFDPH, CDC, and other stakeholders are receiving a full year of data and using the data in a timely manner	SFDPH
	• Report data from January - December 2002 to CDC (April)	SFDPH
	• Report data from January - December 2002 to State (June)	SFDPH
	• Continue to provide technical assistance to providers regarding reporting and use of data (January - September)	SFDPH, OD/TA
	2. By September 2003, SFDPH and the HPPC will complete a new strategic evaluation plan	SFDPH, HPPC
	• Analyze what San Francisco has accomplished in terms of the objectives outlined for years one through four and develop recommendations for improvements (January - June)	SFDPH, HPPC
	• Write new plan (January - September)	SFDPH, HPPC

## SUMMARY OF REQUIREMENTS

Beginning in 2001, there will be four primary data collection/evaluation requirements for providers:

- One behavioral outcome objective for at least one intervention (SFDPH/HPPC)
- CDC-required process evaluation and outcome monitoring data as adapted for San Francisco (SFDPH/HPPC/CDC)
- SIQ (State of California Office of AIDS)
- Client satisfaction (San Francisco Health Commission)

As outlined in the timeline (Exhibit 1), further streamlining and combining of these requirements will occur between 2001 and 2003 through coordination among the various funders and the HPPC.

## WHAT HAPPENED TO THE BRA?

In April 2000, the HPPC voted to eliminate the requirement for conducting and reporting on the behavioral risk assessment (BRA), an evaluation tool created in the last evaluation plan for San Francisco. Although agencies may opt to continue to use the BRA to measure their outcome objectives, the specific BRA instrument is no longer an HPPC requirement. The SFDPH will phase it out of contracts at their discretion, and providers, the HPPC, and SFDPH will decide which BRA variables should be retained for the new data collection system. There are several reasons for the discontinuation of the requirement to conduct the BRA:

- The goal of the BRA was to build the capacity of agencies to do their own data collection and analysis, and this goal has been

achieved with most agencies.

- Each agency designed its own BRA based on a template. Because each BRA is different, the BRA data from the various agencies can never be combined to give a picture of who is being served in San Francisco as a whole.
- Many of the data elements in the BRA, both

behavioral and demographic, are similar to those now being required by CDC. Therefore, providers will still collect these data, but in a standardized way and on all clients. During the provider forums in 2000, stakeholders will work together to explore ways to incorporate the most useful elements of the BRA into the new data system.

## Section III: INFORMATION FOR RESEARCHERS

This section focuses on three aspects of HIV prevention evaluation research:

1. Relationship between researchers, HIV prevention providers, and the San Francisco HIV-affected community
2. Outcome evaluation
3. City-wide surveillance using prevention indicators

### GOAL FOR EVALUATION RESEARCH

#### RESEARCHERS, HIV PREVENTION PROVIDERS, AND THE COMMUNITY

Historically, researchers, providers, and the San Francisco HIV-affected community have not always collaborated in their HIV prevention evaluation efforts. However, each has knowledge and expertise to contribute to the fight against HIV. Providers know what works for their target populations and where there are gaps in knowledge, and community members know from experience what prevention interventions work best. Researchers have access to studies that show what is working, but the information often does not get used to improve HIV prevention efforts. To bridge this gap, an environment in which the different stakeholders can share their respective views and experience must be established. The four-year goal is:

*Collaborative mechanisms will be in place to facilitate partnerships among San Francisco HIV prevention providers, HIV-affected community members, and evaluation researchers in the development, implementation, and distribution of results of appropriate and relevant evaluation research.*

Evaluation researchers in San Francisco conduct several types of research, but the two types of research encouraged by CDC are outcome evaluation and city-wide surveillance. The overall four-year goal of creating collaborative partnerships among researchers, providers, and community members will be achieved within the context of these two types of evaluation.

### TYPES OF EVALUATION RESEARCH

#### OUTCOME EVALUATION



**Outcome evaluation** attempts to determine whether a particular intervention is actually causing changes in behavior, as opposed to some other factor that may be contributing to the change. It uses a scientific research design, usually with a control group and sometimes with randomization.

#### Study in Progress

In order to continue to expand our knowledge about the effectiveness of different types of HIV



prevention interventions in various populations, SFDPH conducts outcome evaluation studies on a regular basis. (Other local researchers, such as CAPS, also do outcome evaluation studies.) One such study, the PCM Outcome Evaluation study, was designed in 2000. This study compares the effects of PCM versus multiple session groups on HIV risk behaviors and utilization of services among high-risk HIV-negative as well as HIV-positive individuals.

### **Prioritization of Future Studies**

Although much research on many populations and interventions has been done, gaps in knowledge remain. Because evaluation studies are costly and lengthy, it would not be possible to implement research studies to address all the gaps in knowledge at once. Therefore, the SFDPH and HPPC engage in a prioritization process.

In the past, to prioritize outcome evaluation studies, the HPPC would first identify gaps in research regarding which types of interventions work best for which populations. A list of these gaps was created by compiling completed studies into a research inventory and determining which populations and interventions had not been studied sufficiently. Then the HPPC would recommend a few studies for future implementation. The HPPC would then submit these prioritized studies to SFDPH, who ensured that the studies were implemented. For example, the HPPC prioritized a PCM study in 1998, and the Epidemiology and Evaluation Section of SFDPH subsequently designed and obtained funding for the PCM Outcome Evaluation study, which is now in progress.

In 2000, the Strategic Evaluation Committee redesigned the process used to identify gaps in research. The previous method using the research inventory has several weaknesses. First, many studies may be in progress, or com-

pleted but unpublished, at the time the research inventory is developed, making the research inventory incomplete. Second, this method does not incorporate community input into the research agenda.

Therefore, the Committee recommends the creation of regularly scheduled Evaluation and Prioritization Meetings to replace the previous method of identifying gaps in research. These meetings will bring together (1) researchers doing research with populations who live, work, or hang out in San Francisco, (2) San Francisco agencies providing HIV prevention or other related services, and (3) HIV-affected San Francisco community members. In 2001, two Evaluation Meetings will be held, at which researchers will share results of current evaluation research and information about studies in progress or those soon to be implemented, and providers and other community members will have opportunities to give feedback, ask questions, and share their experiences. From the presentations given at these two meetings, as well as a literature review, a preliminary research inventory will be developed. Then, in early 2002, a Prioritization Meeting will be convened, at which the goal will be to prioritize at least one outcome evaluation study. At this meeting, researchers, providers, and community members will use the research inventory to jointly identify gaps in research and prioritize studies to be done. Then the cycle will begin again: two Evaluation Meetings in the second half of the calendar year for sharing results of current research, eliciting community feedback, and expanding the research inventory, and one Prioritization Meeting at the beginning of the following calendar year to prioritize studies based on gaps in the research inventory. From the list of studies prioritized at the annual Prioritization Meetings, the HPPC will select studies to recommend to SFDPH as it becomes feasible for SFDPH to implement the studies.

## CITY-WIDE SURVEILLANCE USING PREVENTION INDICATORS



**Surveillance** is the ongoing process of collecting, analyzing, and interpreting data related to a disease on a large scale to provide a "big picture." A prevention indicator is a data element that may point to trends in the HIV epidemic. Therefore, city-wide surveillance using prevention indicators means that data are collected over time using large samples, and these data are used to assess and predict trends in the HIV epidemic for various risk populations.

### Surveillance in Progress

San Francisco is one of several sites nationally that received a grant from the CDC to facilitate

the development, field-testing, and refinement of standardized national and local HIV prevention indicators. SFDPH participated in the development of these indicators and now tracks them on a regular basis. SFDPH will continue to track these indicators, as well as any additional ones that become relevant. The data will be shared at the annual Evaluation Meeting to allow providers and community members to comment on the data and to interpret and use the data in the context of prevention efforts.

For a description of the indicators tracked, refer to the Surveillance and Research chapter, p. 196.

## OBJECTIVES AND TIMELINE FOR EVALUATION RESEARCH

### EXHIBIT 2: EVALUATION RESEARCH OBJECTIVES AND ACTIVITIES FOR SAN FRANCISCO WITH TIMELINE

<i>Time Frame</i>	<i>Objectives and Activities</i>	<i>Group(s) Responsible for Implementation</i>
Year 1 (2000)	1. By December 2000, SFDPH and HPPC will make preliminary plans to convene the first Evaluation Meetings <ul style="list-style-type: none"> <li>• Establish a planning group of local researchers, HIV prevention providers, and community members (September - December)</li> </ul>	SFDPH, HPPC SFDPH, HPPC
	2. By December 2000, SFDPH will begin to implement the outcome evaluation study (PCM Outcome Evaluation) prioritized by the HPPC	SFDPH
	3. By December 2000, SFDPH will implement new requirements for evaluation researchers regarding letters of support and presenting results (See Additional Information for Researchers section following timeline) <ul style="list-style-type: none"> <li>• Distribute strategic evaluation plan to researchers (October)</li> <li>• Begin to review requests for letters of support for evaluation studies according to new guidelines (October)</li> </ul>	SFDPH SFDPH, HPPC HPPC
	4. By December 2000, SFDPH will have one year's worth of city-wide HIV prevention indicator data <ul style="list-style-type: none"> <li>• Collect data on indicators currently part of the Prevention Indicator Project and new indicators identified as relevant during this period (January - December)</li> <li>• Produce annual city-wide surveillance prevention indicator report (November - December)</li> </ul>	SFDPH SFDPH SFDPH
Year 2 (2001)	1. By December 2001, SFDPH, CAPS, and HPPC will hold and evaluate two Evaluation Meetings with researchers, providers, and community members to share results of current studies and to begin a research inventory <ul style="list-style-type: none"> <li>• Secure funding (January - June)</li> <li>• Convene regular meetings with planning committee (January - December)</li> <li>• Secure space (1st meeting: April, 2nd meeting: September)</li> <li>• Publicize the meetings (1st meeting: April - June, 2nd meeting: September - November)</li> <li>• Conduct the meetings (1st meeting: June, 2nd meeting: November)</li> <li>• Evaluate the meetings (1st meeting: June/July, 2nd meeting: November/December)</li> <li>• Secure funding for 2002 Evaluation and Prioritization Meetings (October - December)</li> </ul>	SFDPH, CAPS, HPPC  SFDPH SFDPH, HPPC SFDPH SFDPH, HPPC SFDPH, CAPS, HPPC SFDPH SFDPH

<b>EXHIBIT 2 (CONT'D): EVALUATION RESEARCH OBJECTIVES AND ACTIVITIES FOR SAN FRANCISCO WITH TIMELINE</b>		
<b>Time Frame</b>	<b>Objectives and Activities</b>	<b>Group(s) Responsible for Implementation</b>
Year 2 (2001) [cont'd]	<ul style="list-style-type: none"> <li>Establish planning committee for 2002 Evaluation and Prioritization Meetings</li> </ul>	SFDPH, HPPC
	2. By December 2001, SFDPH and HPPC will develop a preliminary research inventory based on the literature and presentations given at the two Evaluation Meetings <ul style="list-style-type: none"> <li>Develop criteria for inclusion of evaluation research studies in the research inventory</li> <li>Develop template for describing basic characteristics of evaluation research studies</li> <li>Create the research inventory: describe studies in the literature and presented at the Evaluation Meetings using the template</li> </ul>	SFDPH, HPPC  SFDPH, HPPC  SFDPH, HPPC
	3. By December 2001, SFDPH will complete the PCM Outcome Evaluation study <ul style="list-style-type: none"> <li>Report final results of PCM Outcome Evaluation Study to CDC (December)</li> </ul>	SFDPH  SFDPH
	4. By December 2001, SFDPH will have one year's worth of city-wide HIV prevention indicator data (January - December) <ul style="list-style-type: none"> <li>Collect data on indicators currently part of the Prevention Indicator Project and new indicators identified as relevant during this period (January - December)</li> <li>Produce annual city-wide surveillance prevention indicator report (November - December)</li> <li>Present indicator data at November Evaluation Meeting</li> </ul>	SFDPH  SFDPH  SFDPH  SFDPH
	4. By December 2001, SFDPH will have one year's worth of city-wide HIV prevention indicator data (January - December) <ul style="list-style-type: none"> <li>Collect data on indicators currently part of the Prevention Indicator Project and new indicators identified as relevant during this period (January - December)</li> <li>Produce annual city-wide surveillance prevention indicator report (November - December)</li> <li>Present indicator data at November Evaluation Meeting</li> </ul>	SFDPH  SFDPH  SFDPH  SFDPH
Year 3 (2002)	1. By March 2002, SFDPH, CAPS, and HPPC will hold and evaluate one Prioritization Meeting with researchers, providers, and community to prioritize outcome evaluation studies <ul style="list-style-type: none"> <li>Convene regular meetings of planning committee (January - March)</li> <li>Secure space (January)</li> <li>Publicize the meeting (January - March)</li> <li>Conduct the meeting (March)</li> <li>Evaluate the meeting (March/April)</li> </ul>	SFDPH, CAPS, HPPC  SFDPH, HPPC  SFDPH SFDPH, HPPC SFDPH, CAPS, HPPC SFDPH
	2. By March 2002, researchers, providers, and community members will prioritize at least one outcome evaluation study <ul style="list-style-type: none"> <li>Distribute research inventory, based on the literature and presentations at the 2001 Evaluation Meetings, to prospective Prioritization Meeting participants (February)</li> </ul>	Researchers, providers, and community members  SFDPH, HPPC



## EXHIBIT 2 (CONT'D): EVALUATION RESEARCH OBJECTIVES AND ACTIVITIES FOR SAN FRANCISCO WITH TIMELINE

<i>Time Frame</i>	<i>Objectives and Activities</i>	<i>Group(s) Responsible for Implementation</i>
Year 3 (2002) [cont'd]	<ul style="list-style-type: none"> <li>Prioritize at least one outcome evaluation study for a particular population and intervention at the March 2002 Prioritization Meeting based on gaps in the research inventory (March)</li> </ul>	Researchers, providers, and community members
	3. By December 2002, SFDPH will begin to design and secure funding for one HPPC-recommended outcome evaluation study <ul style="list-style-type: none"> <li>HPPC will recommend to SFDPH at least one outcome evaluation study to be conducted, based on prioritized studies from the March 2002 Prioritization Meeting (September - November)*</li> </ul>	SFDPH  HPPC
	4. By December 2002, SFDPH, CAPS, and HPPC will hold and evaluate two Evaluation Meetings with researchers, providers, and community members to share results of current studies and to update the research inventory <ul style="list-style-type: none"> <li>Convene regular meetings with planning committee (January - December)</li> <li>Secure space (1st meeting: April, 2nd meeting: September)</li> <li>Publicize the meetings (1st meeting: April - June, 2nd meeting: September - November)</li> <li>Conduct the meetings (1st meeting: June, 2nd meeting: November)</li> <li>Evaluate the meetings (1st meeting: June/July, 2nd meeting: November/December)</li> <li>Secure funding for 2003 Evaluation and Prioritization Meetings (October - December)</li> <li>Establish planning committee for 2003 Evaluation and Prioritization Meetings</li> </ul>	SFDPH, CAPS, HPPC  SFDPH, HPPC SFDPH SFDPH, HPPC SFDPH, CAPS, HPPC SFDPH SFDPH SFDPH, HPPC
	5. By December 2002, SFDPH will have one year's worth of city-wide HIV prevention indicator data (January - December) <ul style="list-style-type: none"> <li>Collect data on indicators currently part of the Prevention Indicator Project and new indicators identified as relevant during this period (January - December)</li> <li>Produce annual city-wide surveillance prevention indicator report (November - December)</li> <li>Present indicator data at November Evaluation Meeting</li> </ul>	SFDPH  SFDPH SFDPH SFDPH

\*Note: Although studies will be prioritized annually so that all local researchers may take this information into account in developing their research agendas, HPPC will recommend studies to SFDPH only as it becomes feasible for SFDPH to conduct the studies.

## EXHIBIT 2 (CONT'D): EVALUATION RESEARCH OBJECTIVES AND ACTIVITIES FOR SAN FRANCISCO WITH TIMELINE

<i>Time Frame</i>	<i>Objectives and Activities</i>	<i>Group(s) Responsible for Implementation</i>
Year 4 (2003)	1. By March 2003, SFDPH, CAPS, and HPPC will hold and evaluate one Prioritization Meeting with researchers, providers, and community to prioritize outcome evaluation studies <ul style="list-style-type: none"> <li>• Convene regular meetings of planning committee (January - March)</li> <li>• Secure space (January)</li> <li>• Publicize the meeting (January - March)</li> <li>• Conduct the meeting (March)</li> <li>• Evaluate the meeting (March/April)</li> </ul>	SFDPH, CAPS, HPPC  SFDPH, HPPC  SFDPH SFDPH, HPPC SFDPH, CAPS, HPPC SFDPH
	2. By September 2003, SFDPH, CAPS, and HPPC will hold and evaluate one Evaluation Meeting (and be in the process of planning a second meeting) with researchers, providers, and community members to share results of current studies and to update the research inventory <ul style="list-style-type: none"> <li>• Convene regular meetings with planning committee (January - September)</li> <li>• Secure space (1st meeting: April, 2nd meeting: September)</li> <li>• Publicize the meetings (1st meeting: April - June, 2nd meeting: July - September)</li> <li>• Conduct the first meeting (June)</li> <li>• Evaluate the first meeting (June/July)</li> </ul>	SFDPH, CAPS, HPPC  SFDPH, HPPC  SFDPH  SFDPH, HPPC  SFDPH, CAPS, HPPC SFDPH
	3. By September 2003, SFDPH will have a preliminary report on the outcome evaluation study begun in 2002 <ul style="list-style-type: none"> <li>• Provide preliminary report on outcome evaluation study to CDC (September)</li> </ul>	SFDPH  SFDPH

## ADDITIONAL INFORMATION FOR RESEARCHERS

### SHARING RESULTS

Researchers conducting HIV prevention evaluation studies are strongly encouraged to share results of their studies with the larger San Francisco community and to invite feedback. Researchers funded by SFDPH through the Cooperative Agreement with CDC and those conducting HPPC-prioritized studies are required to share their results. The methods they will use to disseminate findings to the community should be outlined in their research

proposals, but at a minimum they are required to complete the following within six months of the conclusion of data analysis:

- Convene at least one community forum and at least one provider forum that allow a diversity of viewpoints regarding the study and its results to be shared. The forum(s) shall be appropriately publicized and advertised (e.g., if the study subjects were gay men, an advertisement should be placed in local gay publications such as the Bay Area Reporter). These two forums may be done jointly as one forum if appropriate.
- Disseminate a final written community report to all appropriate stakeholders (e.g., if

subjects were clients at a particular agency, the agency should receive several copies of the report, as well as any other agencies that might find the results relevant to their work) and anyone requesting a report.

- Request to present results at an HPPC meeting.
- Post results on the Internet and inform community members about the site.
- Present at the next scheduled Evaluation Meeting (this may not occur within six months after the conclusion of data analysis).

research proposals. Researchers may contact the HPPC or SFDPH to find out how to submit such a request. To receive a letter of support, researchers must plan to fulfill all the requirements listed in the previous section on sharing results, in addition to any other requirements established by the HPPC. If researchers who receive a letter of support from the HPPC do not fulfill the above requirements within six months after finishing their data analysis, the HPPC will write a letter of concern stating such, indicating that the researchers' failure to fulfill the requirements will be considered should they request letters of support in the future.

## LETTERS OF SUPPORT

Evaluation researchers may request letters of support from the HPPC to strengthen their

# Section IV: EVALUATION OF THE COMMUNITY PLANNING PROCESS

In addition to all the types of evaluation described so far, evaluation of the HPPC is also important. In San Francisco, the evaluation of community planning is, and always has been, a high priority. The Council has evaluated its ability to achieve CDC's five core objectives since the initiation of formal community plan-

ning in 1994. Exhibit 3 outlines the array of methods that the HPPC uses to evaluate its progress toward the five core objectives. The HPPC, the HIV Prevention Section, and its consultants use the findings to make adjustments in the community planning process.

**EXHIBIT 3: HPPC METHODS FOR EVALUATION**

<i><b>Core Objectives</b></i>	<i><b>Evaluation Data Source</b></i>	<i><b>Collection, Management, and Dissemination</b></i>
1. Foster the openness and participatory nature of the community planning process.	<ul style="list-style-type: none"> <li>• Evaluation form</li> <li>• Dialogue boxes</li> <li>• CPG survey</li> <li>• Presence of written policies</li> <li>• New member recruitment efforts</li> <li>• Orientation documentation</li> </ul>	<ul style="list-style-type: none"> <li>• Process Evaluation consultant administers evaluation forms, dialogue boxes, and CPG survey and presents results to Co-Chairs, Steering Committee, and HPPC.</li> <li>• HPS* staff documents policies, recruitment, and orientation and holds public comment forms.</li> </ul>
2. Ensure that the community planning group(s) reflects the diversity of the epidemic in the jurisdiction, and that expertise in epidemiology, behavioral/social science, health planning, and evaluation are included in the process.	<ul style="list-style-type: none"> <li>• CPG member composition form</li> <li>• Evaluation form</li> <li>• Dialogue boxes</li> <li>• CPG survey</li> </ul>	<ul style="list-style-type: none"> <li>• HPS staff completes member composition form and includes it with Cooperative Agreement and Annual Report.</li> <li>• Process Evaluation consultant administers evaluation forms, dialogue boxes, and CPG survey and presents results to Co-Chairs, Steering Committee, and HPPC.</li> </ul>
3. Ensure that priority HIV prevention needs are determined based on an epidemiologic profile and a needs assessment.	<ul style="list-style-type: none"> <li>• Presence of Epidemiologic Profile and a Needs Assessment in the HIV Prevention Plan</li> <li>• Use of Epidemiologic Profile and Needs Assessment in setting priorities</li> <li>• CPG survey</li> </ul>	<ul style="list-style-type: none"> <li>• HIV Prevention Plan submitted with Cooperative Agreement and Annual Report.</li> <li>• HPS staff documents process of priority setting.</li> <li>• Process Evaluation consultant administers CPG survey. Results are reviewed by HPPC.</li> </ul>
4. Ensure that interventions are prioritized based on explicit consideration of priority needs, outcome effectiveness, cost and cost effectiveness, theory, and community norms and values.	<ul style="list-style-type: none"> <li>• Strategies and Interventions chapter in the HIV Prevention Plan</li> <li>• Documentation of intervention selection in funded contracts</li> <li>• CPG survey</li> </ul>	<ul style="list-style-type: none"> <li>• HIV Prevention Plan submitted with Cooperative Agreement and Annual Report.</li> <li>• HPS staff ensures contracts include method for selecting interventions.</li> <li>• Process Evaluation consultant administers CPG survey. Results are reviewed by HPPC.</li> </ul>
5. Foster strong, logical linkages between the community planning process, application for funding, and allocation of CDC HIV prevention resources.	<ul style="list-style-type: none"> <li>• Letter of Concurrence with Cooperative Agreement</li> <li>• Tables of allocations for HIV prevention</li> <li>• Table of linkages between interventions in Plan and Application</li> <li>• CPG survey</li> </ul>	<ul style="list-style-type: none"> <li>• Letter of Concurrence is included in Cooperative Agreement Application.</li> <li>• HPS completes tables of allocations form and includes it in Cooperative Agreement and Annual Report.</li> <li>• HPPC reviews Cooperative Agreement for concurrence.</li> <li>• Process Evaluation consultant administers CPG survey. Results are reviewed by HPPC.</li> </ul>

\*HPS stands for HIV Prevention Section.



# Appendix I: OVERVIEW OF NEW CDC EVALUATION REQUIREMENTS FOR HIV PREVENTION PROVIDERS

The CDC has instituted some new requirements around the collection of process data effective as of January 2000. These new requirements will affect ALL HIV prevention services with contracts through the SFPDPH (regardless of whether the funding source is state, federal, or general fund). CDC is requiring that data be collected on ALL client contacts for each intervention type.

According to the CDC:

*"Evaluation is a critical activity for any HIV prevention program that wants to make sure that they are providing the best prevention service possible. For health departments and local providers, evaluation of their planning, implementation, and results allows them to feel confident that they're doing the most they can with available resources and to improve programs where necessary."*

The CDC has stated that they need standardized evaluation data from grantees for the following reasons:

- To determine the extent to which HIV prevention efforts have contributed to a reduction in HIV
- To improve programs to better meet the goal of reducing HIV transmission
- To help focus technical assistance and support
- To be accountable to stakeholders (Congress, the American public) by informing them of the progress made in HIV prevention nationwide

The following is a summary of the new minimum requirements by intervention type. Other requirements (state, SFPDPH, HPPC) will be incorporated as well.

CDC Intervention Category	Client Data	Agency Data
Individual Risk Reduction Counseling (IRRC)	BRP Age Race/Ethnicity Gender Setting where client reached # Sessions client received Matching variable	Agency Name Type of Agency (e.g., CBO) # FTE staff for intervention # volunteers for intervention Cost of intervention Component of CLI
Single Session Groups and Multiple Session Workshop	BRP Age Race/Ethnicity Gender Setting where client reached # Sessions client received Matching variable	Agency Name Type of Agency (e.g., CBO) # FTE staff for intervention # volunteers for intervention Cost of intervention Component of CLI

<b>CDC Intervention Category</b>	<b>Client Data</b>	<b>Agency Data</b>
Venue-Based Individual Outreach (VBIO), Brief & Extended*	BRP Age Race/Ethnicity Gender Setting where client reached Materials distributed	Agency Name Type of Agency (e.g., CBO) # FTE staff for intervention # volunteers for intervention Cost of intervention Component of CLI
Prevention Case Management (PCM)	BRP Age Race/Ethnicity Gender Setting where client reached # PCM sessions client received Serostatus of client Matching variable	Agency Name Type of Agency (e.g., CBO) # FTE staff for intervention # volunteers for intervention Cost of intervention Component of CLI
Health Communication/Public Information (HCPI)**	BRP Age Race/Ethnicity Gender # hotline callers # materials requested # presentations or lectures # exposed to print material # exposed to electronic material # condoms distributed	Agency Name Type of Agency (e.g., CBO) # FTE staff for intervention # volunteers for intervention Cost of intervention Type of HCPI intervention Component of CLI
Partner Counseling & Referral Services (PCRS)***	BRP Age Race/Ethnicity Gender # HIV-positive clients interviewed # client referred spousal partners # client referred other partners Matching variable # partners identified # partners located # spousal partners identified # spousal partners tested # partners HIV-positive # spousal partners newly infected # non-spousal partners identified # non-spousal partners tested # non-spousal partners known HIV-positive # non-spousal partners newly infected	Agency Name Type of Agency (e.g., CBO) # FTE staff for intervention # volunteers for intervention Cost of intervention Component of CLI
Community Level Intervention (CLI)	Data for each "sub-intervention" that makes up the CLI will be reported according to the interventions outlined above.	

**Abbreviations:**

BRP = Behavioral risk population (to be determined by requiring behavioral questions); FTE = Full-time employees.

\*Many client level variables for outreach can be estimated.

\*\*HCPI includes Hotlines, Condom Distribution Program, and Venue-Based Group Outreach / Events (e.g., health fairs, theater, bar events, speakers bureau, large group workshops etc.).

\*\*\* Does not include Counseling &amp; Testing. Demographics are for the index case.

You can download the complete CDC Evaluation Guidance from: <http://www.cdc.gov/hiv/aboutdhap/perb/hdg.htm>

## Chapter 7

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# SURVEILLANCE AND RESEARCH: FOLLOWING THE EPIDEMIC





## CHAPTER OVERVIEW

**Section I: Epidemiologic and Behavioral Research and Surveillance** reviews ongoing HIV-related research in these fields and makes recommendations for future research.

**Section II: Intervention Research** reviews the types of intervention research done in San Francisco and makes recommendations for future studies.

**Section III: Improving HIV Prevention Using Research** discusses the ways in which data and information are integrated into the planning and implementation of HIV prevention strategies and programs in San Francisco.

## Section I: EPIDEMIOLOGIC AND BEHAVIORAL RESEARCH AND SURVEILLANCE

### OVERVIEW

The main sources of HIV epidemiologic and behavioral surveillance data for San Francisco are at SFDPH:

- **HIV Seroepidemiology and AIDS Surveillance Section.** (<http://www.dph.sf.ca.us/PHP/SectHIVSeroAIDSSurv.htm>, 415-554-9000) This Section assesses HIV prevalence among populations at risk, monitors trends in new infections and trends in new modes of infection, detects sub-epidemics, assesses the impact of community-wide prevention programs, and monitors AIDS incidence (i.e., new cases of AIDS), morbidity (i.e., HIV-related illness), and mortality (i.e., HIV-related deaths).
- **Epidemiology and Evaluation Section.** (<http://www.dph.sf.ca.us/PHP/epival.htm>, 415-554-9000) This Section conducts HIV health services and prevention research to determine who SFDPH is serving, whether their service needs are being met, quality of care, barriers to care, and effectiveness of services/interventions.
- **HIV Research Section.** (<http://www.dph.sf.ca.us/PHP/HIVResearch.htm>, 415-554-9000) This Section conducts local research designed to improve existing community-based prevention efforts.

Another organization in San Francisco that conducts HIV epidemiologic and behavioral research is the AIDS Research Institute (ARI) at the University of California, San Francisco (UCSF) (<http://hivinsite.ucsf.edu/ari/index.html>, 415-597-9203). The ARI is affiliated with a number of other HIV/AIDS research entities, including the Center for AIDS Prevention Studies (CAPS) (<http://www.caps.ucsf.edu/>, 415-597-9100), where much of the behavioral research related to HIV risk is conducted.

In addition to SFDPH, ARI, and CAPS, other organizations, university researchers, and community-based organizations in San Francisco also contribute to the body of epidemiologic and behavioral risk knowledge.

### ONGOING DATA COLLECTION AND SURVEILLANCE

#### CORE DATA SOURCES

- **AIDS Surveillance Reports** (<http://www.dph.sf.ca.us/Reports/HlthAssess.htm>, 415-554-9000)
- **STD Surveillance Reports** (<http://www.dph.sf.ca.us/Reports/HlthAssess.htm>, 415-487-5500)
- **HIV Case Reports** (This is not currently

done, but unique identifier HIV case reporting will likely begin in 2002. See the State Office of AIDS website for more information: <http://www.dhs.cahwnet.gov/org/ps/ooa/ooaindex.htm>, or contact them at 916-445-0553.)

## SUPPLEMENTAL DATA SOURCES

**Prevention Indicators Project.** To supplement these core data, the Prevention Indicators Project examines the results of ten diverse case surveillance and behavioral studies as a whole to assess trends in the epidemic over time:

- HIV incidence among MSM in a population-based cohort (from the San Francisco Young Men's Health Study)
- Anonymous test site (ATS) data on recent HIV infections
- San Francisco General Hospital record-based HIV incidence
- HIV incidence at public STD clinics (discontinued in 1999)
- STD case data for rectal gonorrhea (among males), syphilis, and chlamydia
- Frequency of STDs among people living with AIDS (PLWAs)
- AIDS prevalence
- Condom use among gay and bisexual men (from the STOP AIDS Project annual rapid assessments)
- Multiple partners and unprotected anal intercourse among gay and bisexual men (from the STOP AIDS Project annual rapid assessments)
- Unprotected anal intercourse among gay men, particularly among serodiscordant partners (from the San Francisco Young Men's Health Study)

**Rapid Assessment Projects (RAPs).** RAPs are conducted by SFDPH as funds become available. They combine ethnographic, anthropologic, and epidemiologic methods to ascertain the context and trends related to HIV in a defined population. In 2001, a RAP is being conducted to determine the risk behaviors and

risk factors relating to African American MTF.

**HIV prevalence and incidence studies.** The SFDPH, CAPS, and other local researchers conduct numerous prevalence and incidence studies on an ongoing basis, such as the UCSF Urban Health Study targeting IDUs, the Urban Men's Health Study targeting MSM, the REACH study targeting homeless and marginally housed adults, and the Health Evaluation of Young Men in Low-income Neighborhoods of Northern California being conducted by the SFDPH HIV Seroepidemiology and AIDS Surveillance Section. Other epidemiologic studies examine the likelihood of HIV transmission in certain situations (e.g., during oral sex, during sex between women). A complete listing of epidemiologic and other studies currently underway at SFDPH can be found at <http://www.dph.sf.ca.us/>.

**HIV behavioral studies.** The SFDPH, CAPS, and other researchers conduct multiple HIV-related behavioral studies among many different populations, such as young gay Asian and Pacific Islander men, young MSM of color, Latina women, male-to-female transgendered people of color, inmates, young men living in low-income areas, newly infected individuals, heterosexuals, and others affected by the HIV epidemic in San Francisco. These behavioral studies examine issues such as the influence of social settings and drug use on HIV risk, and identify HIV risk behaviors of certain groups. Some examples of behavioral studies currently underway are the Multicultural Men's Health Study (<http://www.caps.ucsf.edu/projects/MMHNews.html>), the San Francisco HIV Behavioral Risk Factors Telephone Survey (<http://www.dph.sf.ca.us/PHP/RptsHIVAIDS/newbrfs.pdf>), and the SFDPH Party and Play Study (being conducted in 2000-2001). A listing of other current CAPS behavioral studies can be found at <http://www.caps.ucsf.edu/projectregistry.html>, and a listing of SFDPH behavioral studies can be found at <http://www.dph.sf.ca.us/>.

**STD data.** STD cases are reported to the health department, and these data act as markers for

risk behavior in certain populations (e.g., recent increases in rectal gonorrhea among men are indicators of unprotected anal sex, which is a risk behavior that could lead to HIV transmission). The San Francisco Monthly STD Reports can be found at <http://www.dph.sf.ca.us/Reports/HlthAssess.htm>.

## NEW AREAS FOR RESEARCH AND FUTURE DIRECTIONS

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Although San Francisco has some of the most in-depth HIV-related epidemiologic data and has conducted some of the most sophisticated behavioral studies in the country, there are some noteworthy gaps in knowledge, which have compromised having a more complete understanding of issues relating to HIV prevention.

### **Race/ethnicity HIV incidence data.**

Although there is substantial information about the HIV-related risk behaviors of various racial/ethnic groups and there are incidence estimates for the eight BRPs, data are inadequate to estimate HIV incidence in relation to race/ethnicity in San Francisco. Without these data, the relative risk of each race/ethnicity within each BRP cannot be determined. As a result, prevention needs cannot be established in this area. Furthermore, HIV prevention providers, particularly in communities of color, are left without comprehensive data to guide their efforts. The HPPC urges the SFDPH to expand its efforts to collect and report HIV incidence data by race/ethnicity.

**Prevalence and incidence data for transgendered populations.** Only one comprehensive study on the epidemiology of HIV in the San Francisco transgender community has been conducted – the Transgender Community Health Project (Clements et al., 1999), which indicated alarmingly high HIV incidence and prevalence among male-to-female (MTF) transgendered individuals. Additional studies

should be done to validate these results. Further, all data collected on MTF transgendered populations in San Francisco should be reported and analyzed separately from data on MSM to substantiate the level of risk for HIV infection in this population.

### **Epidemiologic and risk behavior data among women and other non-gay male populations.**

Many, if not most, of the behavioral studies in San Francisco focus on gay-identified men, because this group is disproportionately affected by HIV. However, the basic precepts of HIV prevention recognize that the high-risk behaviors of other groups should be placed on the research agenda, even if the prevalence and incidence among those populations to date has not been as high as it has been among MSM and MSM/F populations. Continued research and surveillance is needed among women, communities of color, adolescents, and other populations where risk behavior may be high even if prevalence and incidence have been low. One mechanism for increasing data on these populations is oversampling groups that have historically been under-represented (e.g., gay men of color) in research studies.

### **Epidemiologic and risk behavior data among non-gay-identifying MSM.**

Part of the original intent behind shifting from use of the term “gay men” to “men who have sex with men” in discussions about risk behavior was to be more inclusive of men who may have sex with men, but who do not identify as gay. However, the change in the language has not always translated into inclusiveness in terms of those who participate in research studies. As a result, many non-gay-identifying men who have sex with men, especially men of color, have not been adequately included in studies. Further, these men may face unique issues that affect their risk behaviors, and these have yet to be articulated fully. Innovative study recruitment techniques, a reconceptualization of how to reflect the unique situation of these men in the presentation of data, and information on what prevention activities work for these men are needed.



**Data on the relationship between high sexually transmitted disease rates and HIV risk.** In many jurisdictions, the rates or distribution of STDs and HIV mirror each other, as both are transmitted in the same manner. In San Francisco, however, high incidence and prevalence of STDs are sometimes found in the absence of substantial HIV prevalence or incidence (e.g., among African American female adolescents, chlamydia rates are high but HIV rates are low). More research is needed regarding if and how STD trends may indicate community risk for HIV, even if HIV prevalence and incidence are currently low. Such data will help identify the level of need for HIV prevention interventions in populations that may have an emerging HIV epidemic that is not yet apparent in data from other sources.

**Effects of medical advances for AIDS on perception of risk and risk behaviors.** Anecdotal evidence and one recent study (Scheer et al., 2001) indicate that the recent advent of highly active anti-retroviral therapy (HAART) may be having an effect on HIV risk behavior, particularly among gay men. Studies are needed to determine to what extent and how HAART has influenced people's sexual activity and their perceptions about HIV infectiousness.

**Effects of AIDS dissident messages on perception of risk and risk behaviors.** In San Francisco, messages from people who do not believe that HIV causes AIDS, and those that have other HIV/AIDS-related views that are contrary to the dominant perspective, have

been disseminated throughout the community. Many communities, particularly communities of color, are concerned about the effects that such messages may have on HIV risk behaviors. Studies are needed to determine who is reached by such messages and to what degree they influence the behavior of individuals and groups.

**Sexual risk behavior of MSM-IDU.** In light of recent epidemiologic data showing substantial increases in incidence among MSM-IDUs in San Francisco, but not among IDUs, more research on the risk behavior of this group is needed to determine why the incidence is increasing so dramatically. Logic would suggest that the increased risk among MSM-IDU compared with IDU is related to sexual risk taking and injection risk behavior. Research is needed to explore these issues and to determine why sex-related prevention messages are not reaching this group effectively.

**Risk behavior of drug-using MSM.** An examination is needed of the roles of both injection and non-injection drug use in risk-taking, particularly sexual risk behavior. Both MSM and MSM-IDU populations have experienced substantial increases in sexual risk behaviors and estimated HIV incidence since 1997 and drug use has been posited as one possible cause. The SFDPH Party and Play Study (being conducted in 2000-2001) is exploring the role of injectable and non-injectable substances, including speed and other recreational drugs, in HIV risk behavior.

## Section II: INTERVENTION RESEARCH

### OVERVIEW

San Francisco has long been a leader in the development and implementation of research studies that evaluate what types of interventions and programs work for different populations. Both the SFDPH and CAPS conduct such

studies on an ongoing basis and in response to community needs.



## CURRENT INTERVENTION RESEARCH

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**Homebase Evaluation Study.** As information on prevention for incarcerated individuals is sparse, this SFPDPH study begun in 2001 focuses on the efficacy of a case management intervention for HIV-positive inmates in San Francisco, examining outcomes such as medication adherence, post-release use of medical and social services, recidivism, and HIV risk behaviors.

**Intervention studies for HIV-positive individuals.** In response to the lack of information on prevention for positives, a number of current studies examine the effectiveness of various prevention interventions for HIV-positive people, including one on the role HIV-positive gay and bisexual men can play in preventing new infections (<http://www.caps.ucsf.edu/projectregistry.html#hays>), the Unity Project (<http://www.caps.ucsf.edu/unity/>), and the Bay Men Project (<http://www.caps.ucsf.edu/BayMen/>).

**Prevention Case Management (PCM) Outcome Study.** This SFPDPH study begun in 2000 compares the efficacy of a PCM intervention versus a control condition, a multiple session workshop intervention, in reducing sexual and drug use risk behaviors. This is one of the first outcome studies in the nation to evaluate the effectiveness of PCM, which is a relatively new intervention.

**The San Francisco PEP Study.** (Kahn et al., 2001) This CAPS study just completed in 2001 examined the feasibility of the use of post-exposure prophylaxis (PEP) (also known as post-exposure prevention) for sexual or injection drug use-related exposure to HIV. This is one of the first studies to evaluate the PEP intervention. It concluded that PEP is a feasible and acceptable intervention for sex-related HIV exposure and is sought especially by MSM. It is less utilized by IDUs, a phenomenon that needs further exploration. The efficacy of PEP for exposure through

sexual or injection drug use means has not been established. A second phase of this study may clarify some of the issues regarding effectiveness, as well as document the long-term effects of PEP use.

**Collaborative intervention research.** Some community-based organizations in San Francisco are working with researchers and evaluators to assess the effectiveness of various interventions. See discussion of Technology and Information Exchange Core later in this chapter.

**CAPS intervention studies.** CAPS conducts intervention research regarding both primary and secondary prevention among several populations, including heterosexual serodiscordant couples, young gay and bisexual men, HIV-positive individuals, and adolescents. The effectiveness of interventions such as community organizing, empowerment, and social-network based programs are explored.

## NEW AREAS FOR RESEARCH AND FUTURE DIRECTIONS

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As with San Francisco's epidemiologic and behavioral data, there is an extensive body of intervention research to inform the development and implementation of prevention programs. These studies are not exhaustive, however, and as new and innovative strategies are implemented there is a need to determine the extent of their effectiveness. Some areas needing further study are:

**Internet.** Although the Internet has been used extensively as a means to meet potential sex partners (Bull and McFarlane, 2000) and some cases of syphilis in San Francisco in 1999 were traced to an Internet chat room (Klausner et al., 2000), the Internet has been largely unused as a means for delivering HIV prevention interventions. Studies are needed that evaluate the feasibility and effectiveness of interventions delivered via the Internet, including social market-

ing interventions, one-on-one counseling interventions done via chat or instant messaging mechanisms, and small group interventions implemented through chat rooms.

**Post-exposure prophylaxis/prevention (PEP).** PEP has been documented as a feasible and effective intervention for occupational exposure to HIV (Cardo et al., 1997). Only a few studies have documented its feasibility and acceptability for use among those exposed through sexual or injection drug use-related means (Kahn et al., 2001, Kalichman, 1998), and none of these has established its effectiveness at preventing seroconversion in these groups; therefore, further studies are needed in this area. Additional studies are also needed to examine the feasibility and acceptability of PEP among IDUs and to determine why they do not access PEP as much as individuals exposed through sexual means (Kahn et al., 2001). Finally, additional cost-effectiveness data are needed to inform guidelines regarding under what circumstances PEP should be administered.

**Prevention for positives.** Historically, HIV prevention has focused on HIV-negative individuals and how they can protect themselves from acquiring HIV. Until recently, the prevention community has given insufficient attention to the unique primary and secondary prevention needs of HIV-positive individuals. A number of studies have been implemented in the last few years to determine the effectiveness of various interventions, and it is hoped that this trend will continue.

**Serostatus approach.** The idea of encourag-

ing HIV counseling and testing as a starting point for determining to which prevention and/or care services to direct a person is not a new idea. However, the cost-effectiveness of this approach, its contribution to improving linkages between prevention, care, and other social and medical services, and its effectiveness compared with other approaches for which HIV testing is not a central component have been understudied.

**Difficult-to-reach and marginalized populations.** There is a need for more research to establish which interventions work best with high-risk groups that may have less access to prevention or for whom there have been few targeted interventions, such as transgendered women, men who have sex with transgendered women, non-gay-identifying men who have sex with men (particularly men of color), visually or hearing impaired individuals, people with developmental disabilities, people who do not read, people who speak English as a second language, and people who speak non-English languages.

**Effectiveness of specific interventions for specific populations.** In 1998, the HPPC identified some gaps in information about the effectiveness of various interventions. Strategies and interventions such as condom distribution, individual risk reduction counseling, media, and outreach are needed to determine whether they are effective for various BRPs and subgroups within the BRPs. A complete listing of gaps can be found in the 1998 Addendum to the HIV Prevention Plan (HIV Prevention Planning Council, 1998, p. 156).

## Section III: IMPROVING HIV PREVENTION USING RESEARCH

### COMMUNITY PLANNING

The primary mechanism for translating

research into improved prevention is the community planning process. The HPPC presents data and information from all of the sources listed in this chapter in its Comprehensive HIV

Prevention Plan. The information is used to prioritize populations based on risk, to make recommendations for allocation of resources based on these priorities, and to present options for strategies and interventions targeting these high-risk groups based on their documented effectiveness in various populations. The priorities and strategies enumerated in the Plan form the basis for the SFDPH's request for proposals, such that community-based organizations (CBOs) and other groups applying for funding must demonstrate that their proposed programs are commensurate with the priorities established in the Plan. In this way, research informs the way that prevention programs are implemented in San Francisco.

## **DATA ON REQUEST**

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The Plan attempts to present data in a way that is useful for all the stakeholders in HIV prevention in San Francisco, but sometimes the mode of presentation does not meet the specific needs of a community. Therefore, SFDPH staff do tailored data analysis and give presentations to CBOs and other entities on request regarding the Epidemiology of HIV and AIDS in specific populations. HIV prevention programs then use this information to direct the focus of their efforts.

## **LOCAL CONFERENCES**

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Two new local conferences are beginning in 2001 that aim to increase communication and collaboration among researchers, HIV prevention service providers, and the HIV/AIDS community at large. First, CAPS is holding its first annual conference in April 2001 on model prevention programs, current research findings, new directions in HIV prevention, methods, and dissemination strategies for sharing information in the HIV/AIDS community. Second, the HPPC is sponsoring an ongoing series of evalu-

ation and prioritization meetings with the goals of (1) creating and maintaining an HIV research inventory of studies in progress in the City and County of San Francisco, and (2) prioritizing intervention research studies based on gaps identified in the research inventory.

## **TECHNOLOGY AND INFORMATION EXCHANGE CORE (TIE CORE)**

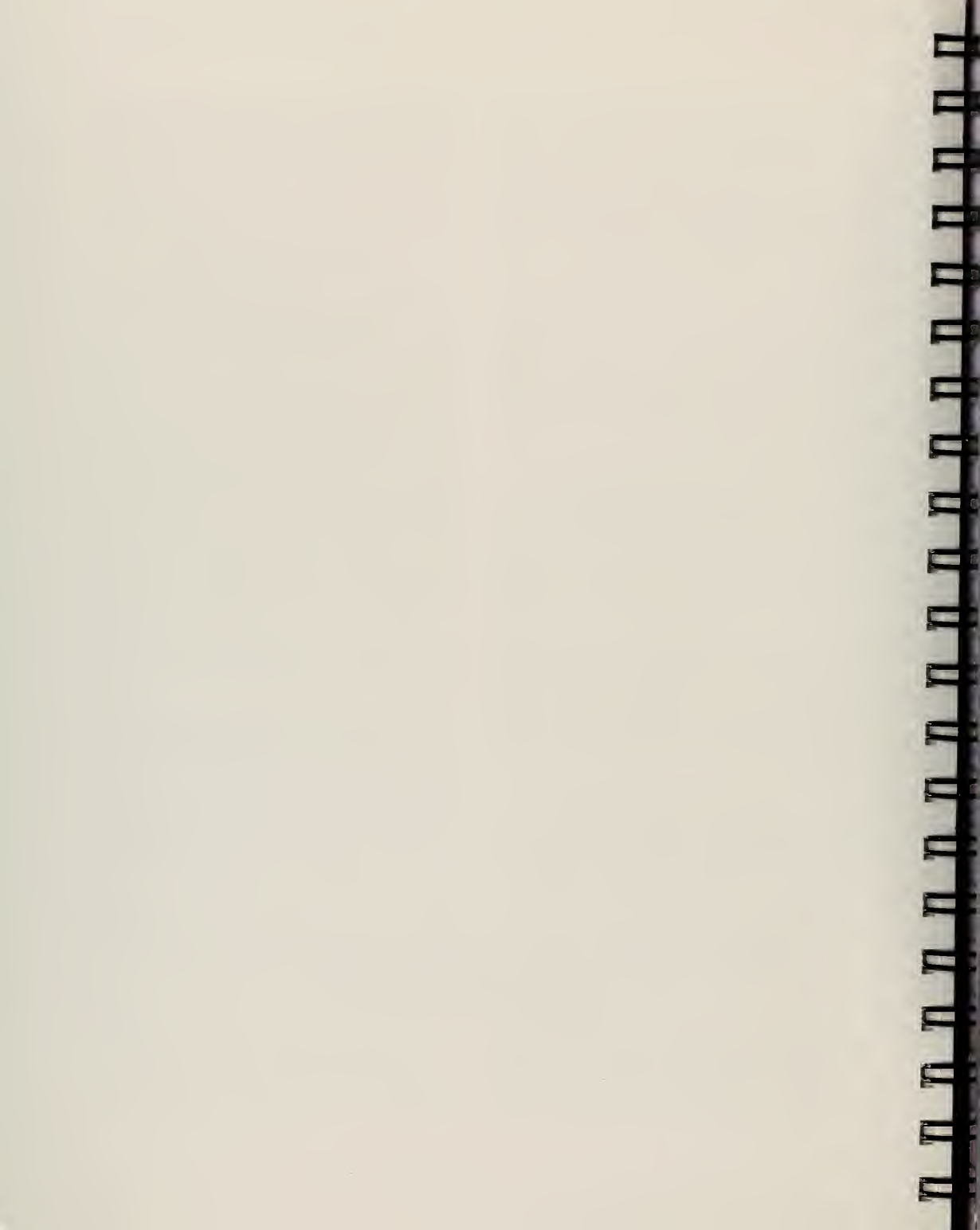
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This CAPS project creates linkages between researchers and HIV prevention providers with the goal of mutual capacity building. To date, over 25 collaborations between researchers, funders, and CBOs have been established through the HIV Prevention Evaluation Initiative of TIE Core. Some of the goals of this initiative are "to develop evaluation skills among CBO staff participants, to bring university researchers new insights on populations at risk for HIV, to gain insight into real-world conditions that affect model program designs, and to evaluate the process of community-based research" (<http://www.caps.ucsf.edu/capsweb/projects/NCGreportback.html>).

## **TECHNICAL ASSISTANCE**

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Technical assistance is available to all funded HIV prevention providers in San Francisco through the Organizational Development/Technical Assistance (OD/TA) Project. Part of the role of OD/TA is to assist providers to use data they collect on their specific target populations, as well as existing city-wide data, to improve their programs. Beyond OD/TA, providers can take free classes at the STD/HIV Prevention Training Center in Berkeley (<http://itsa.ucsf.edu/~bolan/HOME.htm>) on topics such as using behavioral theory in HIV prevention and program design and evaluation.





## Chapter 8

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# LINKAGES AND COORDINATION: PARTNERSHIPS IN HIV PREVENTION



## CHAPTER OVERVIEW

**Section I: Introduction** reviews some overall items to consider when developing linkages and referrals, as well as HPPC recommendations for improvement.

**Section II: Overview of Linkages and Referrals in San Francisco** outlines how such activities are conducted in the city, including referrals and linkages within the HIV prevention provider community, between HIV prevention and other related services, and between HIV prevention and HIV care/treatment services.

## Section I: INTRODUCTION

Meeting the basic and comprehensive needs of individuals at risk for HIV is critical to fostering the health behaviors that prevent HIV infection. At the same time, it is unrealistic to expect that HIV prevention providers will be able to address and meet all client needs within their own programs. This is where the importance of coordination and linkages among programs and services becomes apparent. Some methods of linking services include referrals, collaborations, shared projects or events planning, shared facilities, cooperative working agreements, informal networking, shared outreach, interagency case conferencing, and community meetings. This chapter provides an overview of linkages and coordination among services in San Francisco; refer to the 1997 HIV Prevention Plan for more in-depth information and findings from provider interviews conducted in 1996 (HIV Prevention Planning Council, 1997, pp. 578-603).

### CONSIDERATIONS FOR LINKAGES AND REFERRALS

**There is a lack of available resources.** In all areas of health and social services, resources are limited and services are not always available for everyone in need. Regarding HIV services, in general, fewer resources are available for the HIV-negative client compared with those living with HIV. Further, the system of HIV prevention on its own may not be able to address

the spectrum of needs of HIV-negative individuals, such as housing, economic needs, substance abuse treatment, and mental health services, and may present difficulties when attempting to link to appropriate resources for referral.

**Provider involvement is needed for successful referrals.** A referral is more likely to be successful when the provider accompanies the client to the referral agency, helps the client make an initial appointment, or provides assistance with intake and/or enrollment. Personal connections among staff at referring agencies can help a provider feel more confident about the quality of referral and its appropriateness for the client, as well as make the client more comfortable when entering a new environment.

**Substance use is a significant issue for many HIV prevention clients.** Prevention providers need to have an awareness and a clear understanding of the role that substance use plays in the lives of high-risk clients, so that a continuum of care can be provided and so that prevention staff are prepared to address clients' needs while they are waiting for space to open up at treatment programs.

**HIV testing and partner counseling and referral services are a pivotal point for referrals.** The pivotal role of HIV testing and partner counseling and referral services in linking clients to needed services cannot be stressed enough. HIV testing is the point when

clients who test positive for HIV can be connected to early intervention, care, and treatment services. For individuals testing negative, the testing intervention provides a tremendous opportunity to assess need and link clients to other services, including specific HIV prevention services or other services that address the immediate concerns of an individual (e.g., substance use, housing, income assistance, health care, mental health, STD diagnosis and treatment). Similarly, partner counseling and referral services provide opportunities for HIV-positive clients to notify partners who may have been exposed to HIV and provide both HIV-negative and positive partners services such as primary prevention, risk reduction counseling, early HIV treatment, and other social and medical services.

## **HPPC RECOMMENDATIONS FOR REFERRALS AND LINKAGES**

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**Recommendation 1: Increase support for successful referrals and linkages.** To meet this goal the AIDS Office can take several steps:

- The AIDS Office can develop contracts with providers that minimize disincentives for and maximize incentives for referrals and linkages (e.g., some units of service requirements can be disincentives for collaborative efforts).
- The AIDS Office can allot funds and time in provider contracts for referral system planning and development.
- The AIDS Office can allocate sufficient funds to maintain an up-to-date (i.e., updated at least once a year) referral guide for HIV prevention providers.
- The AIDS Office can develop and implement a plan for increasing linkages among HIV prevention, HIV care services, and STD detection and treatment services. Planning should include the development of a referral system linking prevention and care services and should provide for training for agencies on this system.
- The AIDS Office can conduct an assessment/evaluation of existing referral networks that affect the delivery of HIV prevention services and make and implement recommendations for improvement at least every three years.
- The AIDS Office can provide the support necessary for providers to implement the HPPC recommendations 2 through 6.

**Recommendation 2: Expand providers' knowledge of services and referral resources and strengthen relationships among referring agencies.** Providers can play an active role in achieving this goal:

- All providers should be aware of all services available, particularly those outside the HIV prevention community, including substance abuse treatment and mental health services. Providers are encouraged to engage in informal information sharing to build knowledge about referral resources and ensure that referrals are appropriate for clients (e.g., hold inservice trainings, provide appropriate training and orientation to new staff about referral resources, encourage line staff to attend meetings convened by the AIDS Office).
- All HIV prevention providers should be aware of an entry point to services for HIV-positive clients, and all CTR/PCRS and hotline providers should be aware of all types of services available for both HIV-negative and HIV-positive clients.
- Providers should have close communication and coordination to avoid duplication of services for individual clients.
- Providers should encourage and support the development of personal contacts and relationships with staff at referring and destination agencies.
- Agencies serving youth should build communication and referral mechanisms with San Francisco Unified School District programs and clinics.

**Recommendation 3: Implement and maintain referral tracking mechanisms.**

- Providers should develop methods to track incoming and outgoing referrals, as well as



referral outcomes (e.g., whether and how the client used the service he or she was referred to), in a confidential and standardized way.

- Providers should conduct quality assurance to monitor the acceptability and appropriateness of referrals and referral-related agreements between agencies.

**Recommendation 4: Expand and strengthen linkages within the HIV prevention provider community and between HIV prevention providers and other related services.**

- Providers should establish and strengthen relationships with other agencies that serve similar populations (e.g., similar in age, gender, culture) to improve referral mechanisms, maximize resources, reduce duplication of services, and provide more comprehensive, continuous care.
- Primary and secondary HIV prevention providers and HIV/AIDS care providers should work together to provide appropriate HIV prevention services for HIV-positive individuals.
- Providers should work together to establish more co-located services (e.g., needle exchange and HIV/STD testing).
- Providers are encouraged to create cooperative cross-program and cross-agency relationships (e.g., a staff person from one agency is on site at another agency to facilitate referrals or other linkages for clients, staff go on site to other programs to introduce their services to clients of these programs, develop cross-program and cross-agency continuing education programs for HIV prevention staff).
- HIV prevention providers and STD detection and treatment services should work together to increase linkages and referrals.

**Recommendation 5: Providers who wish to develop collaborations should incorporate the following components into all of their proposals and contracts.**

- Clearly define the common goal of the collaborating partners.
- Outline collaboration goals and objectives

(including outcome objectives) that will result from the collaborative effort.

- Define shared units of service for the collaboration and each partner's contribution to these units of services. Also include the collaboration's procedures for addressing non-compliance among its partners in terms of these commitments.
- Clearly define the roles and responsibilities of each collaborator/partner including the fiscal agent and the programmatic lead (if different).
- Describe the commitment of each partner and the programmatic benefits for each partner.
- Describe how services will be enhanced through the collaboration (e.g., increased quality, increased variety in types of service, decreased barriers to access, increased number of people served, decreased costs, shared expertise) and why the collaboration is the best method for providing this service.
- Describe how each partner will have input into the decision making process of the collaboration.
- Describe a plan for maintaining the organizational structure of the collaboration (i.e., a plan for developing policies and procedures for the collaboration, such as leadership roles, facilitation mechanisms, conflict resolution and mediation mechanisms, grievance policies, lines of communication, problem solving and decision making procedures, and methods of accountability).
- Describe the anticipated challenges to collaborating, including non-compliance of one or more partners, and how the collaboration plans to address these challenges.
- Describe a plan to evaluate the process for collaboration (e.g., Were working relationships successful?, Were there clear lines of communication between partners?, Did each partner fulfill its commitment to the collaboration?)
- Describe the collaboration's relationship to the AIDS Office (e.g., Will each partner communicate directly with the AIDS Office or will one partner be the AIDS Office liaison?)

## Section II: OVERVIEW OF LINKAGES AND REFERRALS IN SAN FRANCISCO

### REFERRALS

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#### COMMON TYPES OF REFERRAL

- General health care services
- HIV counseling and testing
- STD counseling, detection, and treatment
- Substance abuse treatment or mental health services
- Needle exchange
- Domestic violence services
- Housing, shelter, or food services
- Immigration or legal services
- English as a second language (ESL) or other education services
- Employment, job readiness, and income support (e.g., Temporary Assistance for Needy Families, or TANF, which used to be called AFDC) services
- Services related to the special needs of populations such as youth, communities of color, transgendered persons, or the disabled

#### IMPLEMENTING A REFERRAL PROCESS

**Client Assessment.** Assessing clients' referral needs can be done informally or verbally (e.g., based on client requests for services, during client-provider dialogue, based on provider intuitions) or formally (i.e., a written protocol form that the provider follows based on client response to questions regarding health and service needs). Many providers use a combined approach of formal and informal assessments. The choice of assessment method depends on the service setting, the nature of the provider-client contact, and provider training and skills.

**Referral Mechanisms.** The mechanisms for making referrals vary by type of provider and the nature of the provider-client contact. Some

examples of referral mechanisms are:

- Completing a referral form in triplicate (one copy each for the referring agency, the destination agency, and the client)
- Personally accompanying the client to a referral
- Writing down referral information for the client
- Giving a verbal referral
- Establishing a toll-free line to provide referrals.

**Documenting Referrals.** Referrals can be documented using:

- Field notes or activity reports (used with outreach)
- Client charts and case notes, with referrals documented in both the treatment plan and the text of the charted case notes and sometimes in a referral log (can be used with case management and confidential HIV counseling and testing)
- Client contact forms or testing forms (are used with anonymous and confidential HIV counseling and testing)
- Computerized databases

**Conducting Referral Follow-up.** The mechanisms for referral follow-up and follow-up rates vary depending on the type of intervention and nature of client contact. Referral scenarios generally fall into two categories. When a provider has a brief encounter with an unknown or infrequent client, the referral follow-up is generally low. When a provider has relationship with a client, referrals and follow-up are basic components of the treatment plan and are integral to the services provided. In this scenario, referral follow-up is much higher. Methods for conducting follow-up include:

- Calling or meeting with the client and asking if he or she used the referral (calls can be

made by staff or volunteers)

- Calling or meeting with the destination agency or individual provider (for internal and external referrals)
- Giving referral cards to clients, which are collected at the destination agency and returned to the referring agency (may not be the most accurate method of follow-up)
- Asking staff at destination agencies to document where clients were referred from (especially useful when the referring agency is an anonymous test site)

**Receiving Incoming Referrals.** As with outgoing referrals, mechanisms for accommodating incoming referrals can be formal or informal and may vary based on the type of service. Non-HIV prevention providers making referrals to HIV prevention services include hotlines, substance abuse services, mental health services, health clinics, schools, the Department of Social Services, the Juvenile Probation Department, and STD Services.

**Addressing Barriers to Providing/Receiving Successful Referrals.** Many barriers to implementing a referral system are related to lack of referral resources, lack of time, lack of financial or human resources, and client-related barriers. Although it may not be possible to remedy all of these issues, both the AIDS Office and providers should be aware of these barriers and attempt to address them when feasible. Some obstacles to successful referrals include:

- Lack of time to develop referral networks
- Rapid and frequent changes in staffing and programs among CBOs
- Lack of resources to keep resource guides current
- Lack of agency resources for trainings/orientations to keep providers up-to-date
- Lack of services to refer people to in general, and lack of appropriate services in particular
- Lack of connection and communication among providers
- Lack of an agency's ability to provide a service, despite a commitment to provide that service

- Lack of user-friendly written information on available services for clients
- Difference among providers regarding importance of and capacity to deal with referrals
- Conflicts with a client-centered approach (i.e., a provider who believes a client should only receive the services he or she identifies is unlikely to extend information for other services)
- Demand for services exceeding provider capacity
- Eligibility requirements may exclude groups from receiving services at certain agencies
- Some clients may not be ready, may not see value in the service, or may be intimidated regarding accessing a new service system
- Some types of contact are not conducive to a successful referral (e.g., one-time phone contacts)

## NON-REFERRAL LINKAGES

### COMMON TYPES OF LINKAGES

- Funded collaborations
- Coalitions
- Community-building with agencies serving similar target populations
- Memoranda of understanding (MOUs) (e.g., referral agreements)
- Joint projects, special events, or trainings
- Networking
- Sharing of materials, space, or administrative costs
- Sharing of staff services (e.g., staff provide services at another agency's site or for another agency's clients)
- Sharing of experience, knowledge, and information (e.g., at joint meetings)

### BARRIERS TO LINKAGES BETWEEN ORGANIZATIONS

As with barriers to successful referrals, it may not be possible to address all of the barriers to

successful linkages; however, the AIDS Office and providers should be aware of these issues and attempt to resolve them when feasible. Barriers include:

- Restrictions imposed by funding and contractual requirements (e.g., units of service can be a disincentive to "sharing" clients, not including referrals/referral documentation in contracts can be a disincentive for implementing thorough referral mechanisms)
- Lack of time for staff to develop relationships and linkages
- Differences between agencies in HIV prevention philosophies or approaches
- Failure to include line staff in developing the relationships that lead to formal and informal linkages

## **SPECIFIC EXAMPLES OF LINKAGES AND REFERRALS IN SAN FRANCISCO**

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### **LINKAGES WITH HIV/AIDS CARE AND TREATMENT SERVICES**

**Individuals Newly Diagnosed with HIV.** Clients receiving HIV-positive results are referred to care/treatment services from anonymous or confidential HIV counseling and testing programs. Some agencies with CTR/PCRS programs in San Francisco also provide care services, thus facilitating linkages between testing and medical services. For CTR/PCRS programs that do not have care services on site, appropriate referrals are made.

**HIV Prevention for HIV-positive Individuals.** One of the priority populations for prevention in San Francisco is HIV-positive individuals. Therefore, it is critical that linkages be built that help HIV-positive people receiving treatment access HIV prevention services. The SFDPH Prevention for HIV-Infected Persons

Project (PHIPP) focuses on facilitating entry into care, primary prevention, and secondary prevention services for HIV-positive individuals, such that prevention is delivered in the context of health and social services. This program targets populations such as high-risk youth and gay and bisexual men. One of the goals of this program is to improve the capacity of both prevention and care providers to conduct risk assessments and deliver appropriate prevention counseling for HIV-positive persons.

### **LINKAGES BETWEEN COUNSELING AND TESTING AND HIV PREVENTION SERVICES**

Counseling and testing is an effective means of linking HIV-positive individuals with care and prevention services but has not been used as effectively to link HIV-negative individuals with prevention services. The 1999 Linkages Study conducted by the AIDS Office assessed the number of CTR/PCRS referrals to HIV prevention and non-prevention services given to high-risk seronegative individuals in San Francisco (Marx et al., 1999). Two sources of testing and referral data were used: (1) a database of all persons in San Francisco confidentially testing seronegative for HIV ( $n=5,595$ ), and (2) a municipal STD clinic ( $n=747$ ). The prevalence of all referrals from both sources was low. Overall, 19.1% of the database sample and 10.6% of the STD clinic sample were referred to other services. Of those, 15.4% and 5.9%, respectively, were referrals to HIV prevention services. IDUs were the most likely to receive HIV prevention referrals; nearly one-half of the IDUs in the database sample and over one third in the STD clinic sample received referrals. MSM and women with high-risk partners were also more likely to receive HIV prevention referrals than other groups. These findings may indicate areas in which linkages between testing and other services could be improved for HIV-negative persons.



## LINKAGES WITH STD AND TUBERCULOSIS SERVICES

**STD Services.** The HIV and STD sections of SFDPH have created linkages in several ways. For example, the STD Clinic provides CTR/PCRS services for its clients, provides post-exposure prophylaxis/prevention services for those who think they might have been exposed to HIV, links HIV-positive clients to early care services, and monitors HIV prevalence and incidence among clients. Second, the STD and HIV sections collaborate to operate mobile CTR/PCRS services and to offer STD screening and treatment to newly arrested individuals at the San Francisco Jail. STD Prevention and Control also provides training to HIV prevention providers regarding how to incorporate STD counseling into HIV risk and harm reduction counseling, and they support more than ten HIV prevention programs to conduct STD screening and treatment. The SFDPH Party and Play Study, which explores risk-taking among MSM and TSM who frequent locations during late night and early morning where drug use and sexual activity are common, is looking at both HIV and STD prevalence and risk behaviors offers STD testing to study participants. A new and innovative HIV prevention program operated by a community-based organization now combines anonymous HIV testing and STD screening and treatment services.

**Tuberculosis Services.** The tuberculosis outreach clinic, called TOPS, serves clients in the Tenderloin neighborhood of San Francisco, the same neighborhood in which many HIV prevention activities are located. When the tuberculosis health outreach workers visit clients, they offer screening and testing for both tuberculosis and HIV. They also distribute information about needle exchange and cleaning needles, as well as condoms and lubricants, and they assist HIV-positive clients to access medical services. In addition, San Francisco City and County policy requires that all known HIV-positive individuals be screened for tuberculosis every six months. Individuals with positive skin tests are referred

to appropriate tuberculosis control services.

## LINKAGES WITH SUBSTANCE ABUSE PREVENTION AND TREATMENT

Many substance abuse treatment programs in San Francisco integrate HIV prevention activities into their work (e.g., HIV testing offered at substance abuse treatment sites). In addition, the HIV and substance abuse section of the SFDPH coordinate efforts through involving HIV Prevention Section staff in activities of the Treatment on Demand Planning Council, through a joint request for proposals (RFP) to address the needs of MSM methamphetamine users, and through a joint media campaign on heroin overdose. Further, a city-wide committee has developed a plan on integration of several health and social services, including HIV, substance abuse, and mental health, among others.

## LINKAGES WITH THE CORRECTIONAL SYSTEM

The HIV Prevention Section of SFDPH funds CTR/PCRS and health education/risk reduction services in jails. STD and tuberculosis screening and services are also provided in the jails by other SFDPH programs. Released inmates are provided with extensive referrals to HIV, STD, and tuberculosis services as well as a health kit, which includes condoms, lubricants, bleach, and information on how to clean needles and how to use condoms. The Homebase Evaluation Study currently underway is evaluating an intervention for HIV-positive inmates designed to decrease HIV risk behavior, decrease recidivism, and increase use of medical and social services post-release.

## LINKAGES WITH THE PUBLIC EDUCATION SYSTEM

The HIV Prevention Section-funded Wedge Program provides HIV education to students in

grades 6 through 12 in the San Francisco Unified School District (SFUSD), complementing an existing health education curriculum that includes issues such as pregnancy and substance use. The SFDPH STD Prevention and Control section provides STD education, testing, and treatment to SFUSD students in grades 9-12. Condoms are also available to SFUSD

students through these programs. HIV/STD education is also offered at the City College of San Francisco, as are CTR/PCRS and STD and tuberculosis screening and treatment. STD Prevention and Control also provides STD education, testing, and treatment at San Francisco State University.

## Chapter 9

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# TECHNICAL ASSISTANCE: SUPPORTING COMMUNITY-BASED HIV PREVENTION





## CHAPTER OVERVIEW

**Section I: Introduction** describes San Francisco's progress in the area of technical assistance since the first technical assistance needs assessment and capacity-building plan in 1996/1997.

**Section II: Technical Assistance for HIV Prevention Providers** reviews the current needs of providers and describes San Francisco's Organizational Development/Technical Assistance Program.

**Section III: Technical Assistance for HPPC** describes HPPC's current technical assistance needs and the mechanisms in place to address these needs as they arise.

**Section IV: Technical Assistance for the HIV Prevention Section** discusses the health department's needs and how they are addressed.

## Section I: INTRODUCTION

San Francisco has a strong support system in place for its HIV prevention providers, the community planning process, and the health department. Over the last several years, mechanisms have been institutionalized to address the technical assistance (TA) needs of these various groups as they arise, such that San Francisco can take a proactive, responsive

approach to identifying and addressing emerging issues for those working in the HIV prevention field. This chapter describes the ongoing challenges for providers, the HPPC, and the HIV Prevention Section (HPS) and the how TA support system helps these groups to improve their capacity to do effective HIV prevention.

## Section II: TECHNICAL ASSISTANCE FOR HIV PREVENTION PROVIDERS

### PROVIDER NEEDS

**History.** In 1995, with new CDC funds available for capacity-building of community-based organizations, the SFPDH and HPPC created the Organizational Development/Technical Assistance (OD/TA) Program, consisting of a group of independent consultants with expertise in capacity development for community-based HIV prevention providers. One of OD/TA's first projects was to conduct an assessment of provider capacity using self-administered questionnaires and interviews with agency staff, as well as site visits. The issues that arose during the assessment were related to two main areas: (1) organizational develop-

ment (including program planning, staffing issues, budget issues, and fund development) and (2) evaluation capacity and skills (including designing program evaluations, developing instruments, data collection, data entry, and data analysis). Based on the assessment, the HPPC designed a Five-Year Strategic Evaluation Plan to build evaluation capacity among providers (HIV Prevention Planning Council, 1997, pp. 604-638), and OD/TA has focused much of its efforts since then providing assistance to providers in implementing this plan. This section describes the providers' current capacity and TA needs and how San Francisco will continue to address them through OD/TA and other means.

**Evaluation needs.** San Francisco's HIV prevention providers have enhanced their capacity to evaluate their programs in recent years through several mechanisms. For example, as required in the HPPC's 1997 Five-Year Strategic Evaluation Plan, they have been conducting the Behavioral Risk Assessment (BRA), which involves collecting demographic and behavioral risk data from clients, with assistance from the OD/TA Program. They have also analyzed the data and created annual reports. However, depending on the size of an organization and the amount of resources available for evaluation, evaluation capacity still differs among agencies. Based on informal individual assessments done by the OD/TA consultants and providers' self-assessments, providers' ongoing technical assistance needs include:

- Designing program evaluations
- Writing survey questions
- Data entry
- Data analysis
- Database development and data management (especially standardized software that all providers can use to track required data)
- Conducting quality assurance/quality improvement
- Writing policies and procedures for how to conduct evaluation

**Organizational needs.** In attending to the daily needs of clients, it can be challenging to maintain a commitment to the development of an organizational infrastructure that supports and enhances the work of an agency. Staff turnover, lack of time in staff's schedules, and competing priorities may create barriers to organizational development (OD). According to the OD/TA consultants and providers' self-assessments, providers' current OD needs include:

- Developing structures for institutional memory
- Writing policies and procedures
- Training for staff without formal social services training (e.g., conducting client assessments, treatment planning)

- Training and coaching for supervisors
- Enhancing program planning skills (e.g., curriculum development, using evaluation to inform program development)
- Improving staff retention
- Creating effective internal communication mechanisms and improving teamwork (i.e., "getting everyone on the same page")
- Managing volunteers (e.g., developing policies and procedures for volunteer management, orientation/training for volunteers)
- Improving fund development/grant-writing skills
- Working effectively with peer agencies in the community and other stakeholders

## TECHNICAL ASSISTANCE NETWORK FOR PROVIDERS

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**OD/TA Program.** To build additional capacity among providers and assist them with their specific needs, the HIV Prevention Section will continue to fund the OD/TA Program. In the Program, individual consultants are paired with agencies to assist them throughout their contract periods on an as-needed basis. In order to improve the efficiency and effectiveness of the OD/TA Program, the HPPC recommends that the HIV Prevention Section:

- Strengthen the OD/TA Program by securing additional funding so that agencies that need more hours of TA can receive them
- Develop a plan for meeting TA needs of agencies requiring more hours than the OD/TA Program can provide
- To ensure the viability of the Program in meeting the needs of providers over the next three to five years, develop clear goals and objectives for the OD/TA Program
- Develop clear roles, responsibilities, and decision-making protocols/timelines for OD/TA consultants, Program Managers, and agencies (e.g., who has the final decision regarding what the scope of work is for the year for a particular agency, who needs to be

involved in this decision, and when is this decision made)

- Develop protocols for increasing communication among all the stakeholders (e.g., after each meeting with an agency, a follow-up email is sent to the agency, the Program Manager, and the OD/TA lead consultant to update everyone on progress toward completing the scope of work)
- Explore methods for pooling OD/TA resources (e.g., provide trainings to groups of agencies whose TA needs are similar)
- Increase administrative support for the OD/TA Program (i.e., secure additional funds so that the time consultants devote to coordinating meetings and communications does not take away from the time they

devote to giving TA, or transfer logistical responsibilities to the HIV Prevention Section)

**Other technical assistance.** The HPPC is committed to ensuring that providers' TA needs be met through OD/TA or other means. Therefore, the HPPC recommends that the HIV Prevention Section provide a frequently updated list of TA resources to providers, including contact information for local and national TA organizations as well as grants available for TA. Further, the Program Managers should assist their agencies in obtaining such TA, if it has been determined that the TA needed is beyond the scope or capacity of the OD/TA Program.

## Section III: TECHNICAL ASSISTANCE FOR HPPC

### HPPC NEEDS

In 2000/2001 the Process Evaluation Team for HPPC, which assesses the overall functioning of the Council and makes recommendations for improvement, identified TA needs for the HPPC using interviews with HPPC members and observations of HPPC processes. In addition, HPPC members recently participated in two studies involving community planning groups (CPGs), which are still in progress. Preliminary results identified some TA needs for CPGs, including the HPPC. The needs are:

- Member orientation and education
- Interpretation and use of behavioral and epidemiologic data
- Providing adequate "lead time" for HPPC members to review materials and discuss them with colleagues, community members, and other HPPC members, before voting
- Understanding (1) the differences between advocacy and planning, (2) the request for proposals (RFP) process, and (3) who the HIV prevention players are at the city, state, and federal levels and how to work with them
- Leadership development and mentoring
- Understanding and implementation of various planning models
- Retreat planning for team building
- Member recruitment and retention
- Cultural competency/diversity training, both within the HPPC and between the HPPC and the San Francisco community
- Engaging community members who are not HIV prevention providers in the community planning process
- Dealing with community demands or hostile/abusive community actions
- Facilitation training for all members and for all types of meetings, presentations, and discussions
- Conducting community events, such as trainings on the new HIV Prevention Plan and community forums on emerging HIV infections
- Learning how to present complex information (in presentation, written, or other format) to the HPPC, whose members have diverse training and skills, using adult education and training models

## **TECHNICAL ASSISTANCE NETWORK FOR THE HPPC**

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There are several mechanisms in place to address the TA needs of the HPPC on an ongoing basis.

**The HIV Prevention Section.** The HIV Prevention Section staff work very closely with the HPPC Co-chairs and all HPPC members at the Council level, in committees, and on an individual basis, assessing their needs regularly and providing the necessary support. For example, the HIV Prevention Section helped the HPPC organize a thorough 12-hour orientation for new members in 2000 and diversity training in 2001, both identified as needs by the HPPC Membership Committee. In addition, the HIV Prevention Section also links with other AIDS Office staff in the Seroepidemiology and Surveillance, Epidemiology/Evaluation, and Research Sections to ensure that HPPC needs are met. Staff in these Sections provide HIV-related data and results from research studies and offer guidance for interpreting the data. Some staff members from these Sections also serve on HPPC committees.

**The Process Evaluation Team.** This team helps identify HPPC's TA needs by making observations at HPPC meetings and distributing short surveys to participants at every meet-

ing asking them about their experiences. These data are reported to the HPPC Co-chairs, Steering Committee, and the HPPC on a regular basis, and the Co-chairs or HIV Prevention Section staff arrange for appropriate steps to be taken. For example, in 2000/2001 the Process Evaluation Team identified a need to increase parity for members who do not feel comfortable speaking at the large-group HPPC meeting. The Co-chairs worked with the HIV Prevention Section to design and integrate a small-group format into HPPC meetings, which has been very successful and popular. This small-group format was used to discuss the HIV incidence and prevalence estimates from the 2001 HIV Consensus Meeting, and the groups developed goals and objectives for HIV prevention in San Francisco based on these data.

**The Technical Support Team.** This team provides ongoing TA to the HPPC around understanding complex data and information and transforming thoughts, ideas, and interests into concrete plans and actions. In addition, the Technical Support Team works closely with the HIV Prevention Section to ensure that HPPC members' needs are met as they arise. For example, in 2001, the HIV Prevention Section worked with Technical Support to help HPPC members understand the complexities, advantages, and disadvantages of various priority-setting models under consideration by the Council.

## **Section IV: TECHNICAL ASSISTANCE FOR THE HIV PREVENTION SECTION**

### **HIV PREVENTION SECTION NEEDS**

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As San Francisco responds to new trends in HIV, TA in the following areas will assist the HIV Prevention Section to develop and maintain a responsive HIV prevention strategy:

- Training on appropriate evaluation designs and outcome objectives for community-based organizations doing HIV prevention
- Continued support and assistance in identifying and meeting the needs of the HPPC and HIV prevention providers, including instituting appropriate contractual requirements and assisting with program implementation



- Providing leadership in HIV prevention
- Coordinating and collaborating with other sections of the SFDPH (e.g., substance abuse, mental health)
- Implementing innovative and new initiatives (e.g., prevention for positives, care and prevention cross-program activities)

## TECHNICAL ASSISTANCE FOR THE HIV PREVENTION SECTION

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The HIV Prevention Section has several methods in place to address these TA needs.

**SFDPH restructuring.** The SFDPH recently assessed its structure and determined that it was not optimal for supporting coordination and collaboration. The recent re-constitution of the AIDS Office combined all HIV-related departments and sections, improving communication and joint efforts. The sections now in one office are the HIV Prevention Section, HIV Health Services Section, Seroepidemiology and Surveillance Section, HIV Research Section, Epidemiology and Evaluation Section, Budget and Finance, and Contracts Management.

**Consultant teams.** Both the Process Evaluation and Technical Support Teams help the HIV Prevention Section identify and meet the needs of the HPPC, as described earlier.

**Meetings with providers.** Regular meetings with providers keep the Program Managers and other staff current on providers' needs and foster an open, communicative, and responsive relationship between the health department and providers. For example, several meetings were held with providers in 2000 and 2001 to

discuss implementation of the new CDC data collection requirements. In addition, meetings were held during the development of the 2001 RFP to get provider input into the format.

**Ongoing training and assistance.** HIV Prevention Section staff members frequently attend conferences, classes, and educational programs and trainings locally, state-wide, and nationally (e.g., Community Planning Leadership Summit, harm reduction conferences). In addition, the HIV Prevention Section accesses national TA from CDC and other sources as needed (e.g., assistance with HPPC bylaws).

**Research resources.** San Francisco is home to numerous sources of information, including research institutions and individuals with special research interests in the field of HIV/AIDS, contributing to an ever-increasing understanding of the epidemic and ways to prevent new infections. The HIV Prevention Section maintains close relationships with these information resources, including the University of California, San Francisco (UCSF) and its AIDS Research Institute, which encompasses the Center for AIDS Prevention Studies (CAPS) and other HIV/AIDS research groups. Such relationships play a critical role in prevention planning. For example, the San Francisco HIV Consensus Meetings, which determine the HIV incidence estimates that the HPPC uses to determine priority populations, rely on close connections and frequent communications between the HIV Prevention Section and researchers. Further, the researchers provide technical assistance to the HIV Prevention Section and the HPPC by explaining the strengths and limitations of the data, so that they can be used in a scientifically sound manner.



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